Clinical Lecture

ON A

CASE OF HYDATID DISEASE OF THE LIVER REQUIRING OPERATION;

WITH REMARKS ON THE MODES OF MIGRATION OF EMBRYOS.

By THOMAS OLIVER, M.D., M.R.C.P. Lond.,

PHYSICIAN TO THE NEWCASTLE-ON-TYNE INFIRMARY, AND LECTURER ON PRACTICAL PHYSIOLOGY IN THE UNIVERSITY OF DURHAM.

GENTLEMEN,—Most of you have seen with me in the ward upstairs a patient who was the subject of hydatid disease of the liver. By this is meant a condition in which the liver is the seat of a cyst or cysts in which are found echinococcus vesicles floating in fluid, these vesicles being the immature form of a parasite known as the tænia echinococcus. I will give you briefly the history of the case.

Edward S——, aged twenty-seven, an iron-roller from Middlesborough, was admitted into the Newcastle Infirmary on Oct. 30th, 1882, complaining of pain and a sense of fulness over the region of the liver. He is unmarried, and was a healthy man until two years and a half ago, when he began to feel pain in the right chest and a sense of weight in the right hypochondrium. He has never partaken of raw meat, but has eaten largely of pork and pork sausages. He is a great dog-fancier; at the present time there are five dogs at his home. The supply of drinking-water to his house is direct from the main, and there are no wells in the immediate neighbourhood of his dwelling. The patient has a peculiar sallow look, and has lost considerably in weight. He is the subject of extreme constipation, but has never suffered from epistaxis or hæmorrhage from the bowel. He says that he had jaundice in boyhood, and that it lasted a very long time. Some time before the bulging appeared in the right hypochondrium he was obliged to seek medical advice on account of pain which he felt there. As the bulging increased, shortness of breathing came on, and he had distinct rigors. In the early part of October he was tapped by Dr. Hedley of Middlesborough, and sixty ounces of clear serum withdrawn. For a few days he was somewhat prostrated, but the bulging disappeared. Three weeks after the tapping rigors set in and the swelling returned, accompanied by a feeling of pain. On admission his abdomen was somewhat prominent and resistant to the touch, while the sides were rather bulging. From the level of the right nipple down to the lower margin of the lowest rib an absolutely dull percussion note was heard; a similar area of dulness was detected on the left side. Both were continuous in front, so that hepatic, cardiac, and splenic areas seemed to run into each other. The area of dull percussion measured eight inches vertically. The bulging affected particularly the right hypochondrium, for it measured one inch more than the left. Pain was more or less a constant symptom; it was increased on pressure over the epigastric and hypochondriac regions. A well-marked wave of fluctuation was detected over the right lobe of the liver. His urine, which was amber-coloured and acid, had a sp. gr. of 1032, and contained just a trace of sugar. On examination, the chest above the level already mentioned exhibited nothing abnormal. Posteriorly, however, it was noticed that the dulness did not begin for at least two or three inches below the line noticed in front. Over the lower part of the right lung there was detected small moist crepitation; the same was noticed over the base of the left; otherwise the respiratory sounds were normal. The cardiac sounds were healthy. —On Nov. 8th, ninety-two ounces of a greenish-yellow fluid, having a sp. gr. of 1012, of alkaline reaction, and containing a large quantity of albumen, was removed from the right lobe of the liver by means of the aspirator. In this we found numerous hooklets, broken-down cells, and fat globules. The removal of the fluid was attended by a good deal of pain, and was followed by a feeling of prostration and a sense of coldness. A few days after the operation the patient felt remarkably well; the large area of dull percussion over the hepatic region had undergone great diminution. Over the area under the right nipple, where previously a dull percussion note was audible, there was clear percussion, and the breath sounds were distinctly heard, accompanied at the end of inspiration by small crepitation. On November 15th it is reported that the patient had suffered a good deal from pain in the abdomen and from headache. The temperature on the previous evening had reached 103·4°, and in the morning had fallen to 102·4°. There had been slight rigors during the night. His pulse was 120, skin hot, tongue coated, and his lips dry. His respiration was 36 per minute, and he complained of shortness of breath, but there was no stitch-like pain in the chest or abdomen. There was a degree of tympanitic distension of the abdomen, and the area of percussion dulness was carried somewhat upwards. Under the administration of small doses of opium, effervescing mixture, and the application of poultices, the patient somewhat improved. The temperature fell to 100·4° and the pulse to 104; the breathing improved, but he still complained of feeling chilly. From this time onward the temperature oscillated between 100° and 103·4°. The pain in great part disappeared, but the dull area of hepatic percussion increased in all directions. Fluctuation was easily detected from right to left, or *vice versâ*, and a coarse friction sound could be heard on auscultation over the region of the liver. Pressure of the stethoscope gave rise to great pain. It was noticed that the patient lay with his knees drawn upwards, and that he was gradually getting thinner, and was beginning to look haggard. By Dec. 4th the patient was suffering very severely from pain in the right side, extending round to the spine. The dulness on the right side extended from the second intercostal space down to an inch above the level of the umbilicus, and on the left from the third intercostal space to near the level of the crest of the ilium. Fluctuation was distinct, and there was marked bulging of each costal arch. There was evidently fluid in the peritoneum. The heart was felt beating almost in the left axilla, three inches above and two inches external to its normal situation. Bronchial râles were heard over the upper part of each side of the chest. It was now decided to cut down upon the liver and give free exit to its contents. Accordingly, two days after this, my colleague, Dr. Hume, performed the operation of abdominal section, with incision of the liver, taking care to stitch together the walls of the cyst and abdomen. A small quantity of serum escaped from the peritoneum. On incision of the cyst, which was partly adherent, seven pints and eight ounces of a thick purulent fluid escaped, in which we noticed shreds of a delicate membrane. While the fluid drained away the heart could be seen returning to its normal position. A drop of this fluid submitted to microscopical examination was found to consist of pus cells and a few rod-like bodies of a brownish colour and with bulbar extremities; the membrane exhibited delicate lines running across a granular matrix. The operation was performed under antiseptic precautions, and for some time after similar care was given to the dressings. Beyond suffering from a little bronchitis the patient did remarkably well, nothing occurring worthy of note until Dec. 28th. On this and the preceding day thick pieces of membrane were discharged through the abdominal opening, particularly on coughing. About six ounces came away, evidently portions of the cyst-wall. It appeared to the naked eye to be composed of three layers—two outer, white and seemingly fibrous, and between these a brownish-yellow gelatinous substance. It had an offensive odour. Its surface was studded with small whitish nodules, varying in size from a pea upwards, the contents of which exactly resembled semi-coagulated albumen. Portions of this membrane placed under the microscope exhibited a well-marked stratified arrangement, not unlike fibro-elastic tissue. From this date onward nothing occurred, save an occasional attack of bronchitis, to mar the convalescence. Ere the abdominal opening contracted to the extent which you see it now, I had an opportunity of exploring the interior of the cyst by means of the electric light endoscope, and of observing that a granular condition existed similar to that which is seen in the healing of large external wounds. No bad effects followed the illumination. The patient is about to leave the infirmary cured of the hydatid disease of the liver.

Those of you who have had a course of lectures on zoology will readily understand the meaning of the term "alternation of generation"; it is reserved for a feature in the life-history of many of the hydrozoa and entozoa, in which you have a condition of matters something like this. An organism, to start with, contains male and female organs, and

as a result ova are developed within it. These ova, when liberated, develop into sexless forms of life, entirely unlike the organisms from which they sprang. Although sexless they are yet capable of bringing into existence, by a process of budding, myriads of organisms like themselves, and these, again, by a process of budding extend the chain. A time comes, however, in the history of these immature forms when they change their character. They revert to the original bisexual type, and in this way exactly resemble the organism which started the chain. Such is the life-history of the echinococci which cause hydatid disease. They are the immature sexless brood of a parasitic worm known as the tænia echinococcus, and, like the sexless brood to which I have referred, they are capable of perpetuating themselves for a time by a process of gemmation.

Repeated examination in countries where hydatid disease is more or less endemic has caused the dog to be regarded as the victim of the adult worm, or tænia. The tænia, according to Cobbold, is a small cestode, seldom more than a quarter of an inch in length, and composed of four segments, the foremost of which is capped by a pointed beak and armed with a double row of hooklets. It is the fourth or final segment which is sexual. Mature links of the worm are discharged from the bowel of dogs thus afflicted, and by some means or other the ova find their way to drinking water or come into contact with food. Having reached the human stomach by means of these media, the ova lose their shelly covering and the embryos are set free. With their six hooklets they are said to bore their way into the organs of circulation, and in due time reach the liver, lungs, or brain. Ultimately they become fixed, and immediately thereafter begins the metamorphosis by which these embryos become hydatids. Spherical from the first, the hydatid becomes surrounded by a layer of connective tissue which is derived from the proliferating connective tissue in the neighbourhood—rather that, I think, than a secretion from the hydatid itself. At this period the hydatid can be lifted from its bed of connective tissue. On examination it is found to be composed of a membrane enclosing a granular mass. From this granular mass is formed another membrane, more delicate than the other, and lined by nucleated cells. To these two layers Huxley has applied the term ectocyst and endocyst. With the outer of these two layers we have little to do; it is structureless, and is formed of a substance not unlike chitine. The endocyst, though only $\frac{1}{300}$ of an inch in diameter, is very important, for it is from it that all future development proceeds, the first indication of which is seen in the alteration in form which its layer of nucleated cells undergoes. From being flattened they become round, and afterwards elongated, and sooner or later, according to Leuckart, many of them are to be seen as small papillæ projecting into the granular mass. It is to these papillæ, the future scolices, that developmental activity is now transferred, further change in which soon follows upon vacuolation of their contents. A vacuole is detected in their interior, and in time this is found filled with fluid. A stage further on and we find the cavity lined with a delicate cuticular membrane. Beyond this the further steps of development are with difficulty traced. Suffice it to say that each papilla becomes, after an increase in its size and alteration of its form, a true echinococcus head. At times it sacrifices itself, develops an internal germinating membrane similar to the one I have mentioned, from which arise papillæ, and from these again a brood of echinococci. These are the brood capsules that become the daughter vesicles, the parental name being retained for those from which they originated. We have then mother vesicle or original cyst, and daughter vesicles, the larger of which become free and float in the fluid of the mother cyst, while the smaller remain adherent to the wall, and may give rise to a brood of capsules, granddaughters of the original.

Compared with other countries we see little of the effects of echinococci. Not more than thirty-four deaths per annum are reported as due to hydatid diseases—a return which Cobbold is inclined to question, four hundred being, in his opinion, nearer the truth. Even with this higher mortality the death-rate is simply nothing compared with that in other countries. In Iceland, for example, where the disease is so frequently met with as to be considered endemic, it is said that one-sixth part of all the inhabitants annually dying fall victims to the echinococcus epidemic. Australia a few years ago gained for itself a reputation for its high death-rate from hydatid disease. None of the inhabitants of that continent seemed to be exempted: the rich suffered equally with the poor, the shepherds on the plains with the miners underground. As for Iceland, there is something peculiarly unique in its geological conditions which render it a fertile soil for the development of these parasites, especially, too, when taken with the fact that the peasantry of that island maintain a very close intimacy with dogs. Without these animals it is impossible that the disease could be contracted. The possessor of several dogs, the Iceland peasant shares with them his compartment, and allows them to eat off the same plate with himself. Not less than 28 per cent. of these animals are affected. With this relationship maintained between peasant and dog in an island possessing hot springs &c., and with the river-water warm, which is the source of drinking-supply to the inhabitants, who are heedless of sanitary arrangements—with these facts before us we have sufficient explanation as to the prevalence of hydatid diseases in Iceland. One point, too, is of interest, and it is this. According to Schleisner, hydatids are more frequently met with amongst women than men in Iceland, and this can only be explained by the different habits of the sexes. The water which the women use for drinking is obtained from supplies in the immediate neighbourhood of their dwellings, from places to which the dogs have easy access, whereas the men are engaged in fishing or hunting, in pursuits, at least, which take them away from the immediate vicinity in which they live, and, as a consequence, they suffer less.

It is noteworthy that certain organs in the body are affected more frequently than others. Taking my statistics from Cobbold, it appears that out of a total of 700 authenticated cases, the liver has been affected 326 times; the lungs have been affected 62 times; the kidney and bladder, 53 times; the brain has been affected 42 times; the bones have been affected 33 times; and the heart and vessels, 25 times.

Briefly, the liver is affected in 46½ per cent. of those who suffer from hydatid disease; the brain in 6 per cent.; and the heart in 3½. These facts are not, I think, satisfactorily explained by the ordinary theories, bearing upon the migration of embryos. Niemeyer and other authors maintain that once the echinococcus ova or embryos have been discharged from the bowel of the dog and have entered the human intestine, the embryos, freed from their capsule, bore their way by means of their six hooklets through the wall of the stomach or intestine, and, wandering further, finally reach the liver, where they develop subsequently into a true hydatid cyst. I do not question the possibility of this occurring. It is mentioned by so many writers of note that it is probably one of the modes of migration. But what are we dealing with? We have a microscopic object armed with six hooklets, and we are told that by means of these it bores its way through the wall of the stomach or intestine, and such a thing as the capsule of the liver. To my mind the difficulties to the progression of the embryos are by this mode so very great that there must be other channels by which they travel. I do not say that this mode of migration is an impossible one; for we know that parasites travel long distances under the skin. All I say is that the establishment of embryos in the various organs is not always due to their own propelling powers. Echinococcus ova or embryos swallowed along with food, or imbibed with drinking-water, having reached the stomach, are therein subjected to the chemical and triturating process of digestion, the immediate effect of which is the dissolution of the envelope, and the liberation of the embryo. The probabilities are that the embryos do not remain in the stomach any length of time. They pass on into the intestine along with the rest of the food. From the stomach, then, the chances are that the embryos do not make their way by boring into the tissues. They leave the stomach along with the chyme and pass on into the intestine. It is in this part of the digestive tract that the food lingers longest, and consequently it is from it that the embryos pass out into the various organs, their progression accomplished not by boring, unless it be into the venous radicles of the intestine, which pour their contents into the vena portæ. In this way they may reach the liver. By means of the venous system therefore many echinococcus embryos reach the liver, and there they develop into hydatid cysts. The work of preparing tissues at the College for the class of practical physiology has given me many opportunities of detecting scores of ova of parasites, probably of the distoma or fasciola hepaticum in the villi of the intestines of rabbits; and further examination of the liver in the same animal has shown the deposition of ova in

that organ. I have been struck by what seemed to be a coincident deposition of ova, or what might more accurately be described, because I believe this is what takes place, as a rapid appearance of ova in various parts of the liver while the intestinal villi remained here and there full of them. This, and the additional fact that the liver is in both cases the seat of parasitic selection, lead me to believe that the mode of migration of embryos must be the same. The echinococcus embryos, according to this view, find their way into the intestinal villi in the first instance, thence into the lymphatics, or more properly speaking the lacteals, which run at the base of the villi, and as these pour their contents, interrupted no doubt in many cases by lymphatic glands, into the thoracic duct they easily reach the blood; hence the explanation of hydatid disease of lung, brain, kidney, &c. If their onward course is interrupted by the intervention of a gland, then we have them deposited there, and an explanation of hydatid disease of mesentery. From the intestinal venous radicles into which echinococcus embryos may have got by boring, not an unlikely thing, they easily reach the liver, but I see no reason why they, too, do not reach that organ by means of the lymphatics. Lacteals and lymphatics are continuous, and I see from Quain's Anatomy that the deep lymphatics of the liver join, at the side of the cœliac artery, one of the large lacteal trunks, previous to its terminating in the thoracic duct. If the intestinal villi are the easiest mode of ingress for parasitic ova or embryos, as I think they are, since it does away with the idea of propulsion by their own efforts, then by means of the lymphatic connexion which I have shown, the liver would be the organ first reached, because most of the upper intestinal lymphatics pour their contents into large lacteal vessels, and do not communicate with lymphatic glands. Transference of parasitic ova from the intestine is accomplished through the lymphatics. Such a mode of migration not only explains why the liver is in the largest number of cases the organ affected, but it also explains those other cases of hydatid disease of mesentery, and also through the medium of lymphatics, thoracic duct, and subclavian vein, hydatid disease of lung, brain, and kidney. I fail to see how any amount of boring on the part of echinococcus embryos will explain the fact of the right lobe of the liver being most frequently the seat of the disease, unless it be by boring into venous radicles. Taking everything into consideration, however, I regard the lacteals of the intestinal villi as the medium by which parasitic ova gain admission into the economy.

Another question of interest crops up in the development of hydatids. The drinking of water contaminated by echinococcus ova, or the eating of raw meat infected with these embryos, is in many cases followed by the development of hydatids in man; and in the case of dogs in Iceland, if these hydatid vesicles are eaten the mature worm or tænia is the result. Suppose man, however, should swallow hydatid vesicles, would he develop the mature worm? There is no instance of this recorded, so far as I know; and yet portions of hydatid vesicles must have tainted the food or drinking water of men in countries where the disease is more or less endemic. Kuchenmeister considers it not improbable that echinococci, reaching the bowel of a person in whom hydatids exist, develop tænia. I am not sure that man ever develops the tænia. Our knowledge of his relationship to the parasite is that it is the vesicular condition we meet with. There is no absolute reason why the vesicular stage should not be repeated in man. I quite think with Davaine that the hydatid corresponds to a phase in the development of an animal which lives a certain period and which may be produced a certain number of times under the vesicular form. Reverting to my remarks on alternation of generation, you observe a resemblance to the intermediate phase there spoken of.

Trousseau says that the absence of albumen is a distinctive feature of the fluid taken from hydatid cysts. On the first occasion we aspirated S—— we removed a thick, greenish, ropy fluid, which contained a very large quantity of albumen. The cyst had previously been tapped by Dr. Hedley, who kindly sent me the patient, and consequently we had to deal with, not the ordinary fluid of a hydatid cyst, but of fluid which was in great part the secretion of a cyst somewhat inflamed.

Of the treatment of hydatid disease of the liver I need say very little. Medicine can do but little good. The removal of the fluid which bathes the vesicles, and probably nourishes them, is the surest mode of destroying them. Frequently one or two tappings by means of the aspirator will suffice; when it fails, it may, as it did in this case, set up suppuration of the cyst, and require free incision—a procedure not without danger, although most cases, I think, end favourably.

ON A

CASE OF EXPLORATION OF THE KIDNEY.

BY THOMAS F. CHAVASSE,
SURGEON TO THE BIRMINGHAM GENERAL HOSPITAL.

AT the present time, when the surgical treatment of kidney affections is attracting much consideration, the case under notice is interesting with reference to the questions of both diagnosis and treatment.

John T——, aged forty-nine, commission agent, admitted into the General Hospital May 15th, 1882. For a number of years patient has consumed a large amount of alcohol; latterly has much diminished the daily allowance. Six years ago he was suddenly seized with pain in the back (the precise position not defined), lasting for some hours. This was followed by a discharge of blood mixed with the urine. He was then told by his medical attendant that he was suffering from a stone in the kidney. Another attack of hæmaturia took place two or three months afterwards, and a recurrence of this symptom has been noted, at varying intervals, down to the present date. The longest period that it was altogether absent has been four months. Of late the frequency of hæmaturia has much increased. On and off the man has been a patient at the hospital for three years and a half. His first visit was to my out-patient room for complete retention of urine and great bladder distension. This, it was found, was caused by the presence of large blood-clots. An examination of the bladder with the sound and bimanually revealed nothing abnormal. In and around the loin no abnormality could be detected. The patient declined to become an inmate of the hospital. From time to time up to admission I saw him, and he was also under the care of my colleague, Dr. Saundby, and various private practitioners. Large doses of perchloride of iron and ergot seemed to control the hæmorrhage better than any other remedies. The patient was taught how to pass a catheter himself, and could generally relieve the bladder when retention of urine occurred. On admission there was marked anæmia, and it was stated that within the last three months the patient had lost flesh rapidly. The body was, however, fairly well nourished. Pain was complained of in the right lumbar region, passing down the course of the ureter. There was marked dulness in this region, and anteriorly a feeling of resistance on palpation was met with. It was said that "matter" was often seen in the water.

Examination of urine: 40 oz. passed daily, sp. gr. 1023; a cloud of albumen, pus and blood-corpuscles, together with crystals of oxalate of lime.—May 17th: A severe attack of hæmaturia occurred, during which it was necessary to resort to catheterism several times daily.—24th: The pelvis of the right kidney was explored, through an oblique lumbar incision four inches long. An aspirating needle passed into the renal pelvis at several points failed to detect any calculus. Smart hæmorrhage followed these punctures. An antiseptic sponge was inserted into the wound, and left in contact with the kidney until evening, when it was removed, and the edges of the incision united. The patient complained of pain in the regions of the stomach and the bladder; the latter viscus was distended, and on the introduction of a catheter 16 oz. of very bloody fluid were withdrawn.—25th: Morning temperature, 99°; evening, 99·4°. Morning pulse, 102; evening, 112. Antiseptic dressings soaked with bloody serum. Complains of great thirst and of pain shooting down in the direction of the ureter to the testis of the right side. Urine voided without a catheter.—27th: Urine still bloody; reaction alkaline, sp. gr. 1020, albumen $\frac{1}{10}$; blood-corpuscles and crystals of triple phosphates; marked cystitis. Bladder washed out with weak carbolic lotion. The quantity of urine passed daily for the first week after the operation was 34, 43, 40, 45, 38, 36, and 34 ounces.—June 2nd: Antiseptics discontinued, as the wound is rapidly granulating; by the 5th the more acute bladder symptoms had subsided.—30th: Has had no hæmaturia for three weeks, and is free from pain. The patient went home.—July 15th: Read-

mitted to hospital owing to another attack of hæmaturia. Urine faintly acid; contains a little albumen, blood, pus, and epithelial cells. Evening temperature 103°. The hæmorrhage continued until July 24th. In the meantime œdema of both feet and ankles had appeared.—31st: Feeling much better, patient at his own request went home. Subsequently he was removed into the country, where he remained for some weeks, and the hæmaturia nearly ceased.

In November I found he had returned to his own home, and was obliged to keep his bed. There was marked œdema of both feet. A large immovable mass could be detected in the region of the right kidney, and the liver was much increased in size. On the upper part of the right thigh, internal to the femoral vein, there was a pigmented sarcomatous-looking growth the size of a hazel nut. In January of this year a semi-fluctuating mass was found over the left external malleolus; this being incised to a slight extent, revealed a mass of granulation tissue (sarcoma?). The growth in the thigh was enlarging, as were also the intra-abdominal masses. Hæmaturia was no longer complained of; no pain existed; took fluid nourishment only. On February 4th the patient died exhausted.

Twenty-four hours after death, with great difficulty, I obtained permission to make a partial examination of the abdomen. On opening the cavity from the front, a very much thickened diaphragm of peritoneum excluded the right kidney from the peritoneal cavity proper. The kidney itself was three times its normal size, adherent in front to the peritoneal reflexion, and posteriorly to the muscles of the back. No distinct supra-renal capsule could be seen. Externally there was a very thin layer of apparently healthy looking cortical substance; internally the organ was a large mass of caseating material. No calculus was to be found. The opposite kidney appeared somewhat enlarged, but otherwise normal. The bladder was empty, and slightly hypertrophied. The liver was much enlarged, and contained many carcinomatous deposits. By cutting through the diaphragm similar deposits were detected in the right lung. The tumour of the thigh was the size of a walnut, but I was not permitted to remove any for microscopic examination. A portion of the renal substance taken from the inside of the organ showed under the microscope nothing definite, merely débris and fatty matter.

The first point worthy of attention is that nearly seven years elapsed from the first occurrence of hæmaturia until death. Could the bleeding have arisen from any cause unconnected with the neoplasm? Post-mortem examination of the bladder and the opposite kidney failed to detect any other condition that could have excited it. The patient himself, an intelligent man, was always looking out for a small calculus, or gravel, to pass per urethram, and, according to his own statement, nothing of the kind ever happened; so I think it is probable that the commencing carcinoma was the cause of the hæmorrhage. It is an acknowledged fact that renal cancer in adults may extend over a long period, but it is rare for the fatal issue to be postponed for three or four years, although Ebstein speaks of a case in which this condition was demonstrated to have lasted eighteen years. In the present instance, during the last three months of life, the amount of blood passed per urethram was hardly noticeable; this may be explained by the increased growth of the neoplasm causing occlusion of the opening into the ureter. With regard to the operation, the exposed pelvis of the kidney was sufficiently explored by a needle to show that no calculus existed, but the subsequent course of the case would lead me to suggest the advisability in similar operations of making an incision into the pelvis itself, and thus ensuring that the examination be more thorough. From other cases met with I do not think such a procedure would materially affect the after-bleeding from the wound. In this instance hæmorrhage was severe, although the kidney was gently dealt with. It is possible that the malignant nature of the disease might account for this.

If the exploration had revealed the precise nature of the case it seems to me to be justifiable to have made an effort to remove the affected organ. Through the lumbar incision made it certainly would not have been possible to take away the kidney *en masse*, neither would it have been an easy matter to have secured the pedicle. By opening the abdomen from the front, the thickened layer of peritoneum found after death, which covered, and was adherent to, the anterior surface of the kidney, would have rendered removal from the front also scarcely possible. A transverse lumbar incision meeting the oblique cut at its upper part would have been most advantageous. In all probability the peritoneal cavity would have been opened, but extraction could have been completed. In a successful case of nephrectomy performed by Mr. Lawson Tait, by means of a transverse incision, the patient rapidly recovered, although the peritoneum was thus opened; in this instance a previously performed laparotomy had failed to effect enucleation of the viscus. Although a correct diagnosis in the present case was only surmised until the lumbar tumour solved all doubts, yet in obscure cases of hæmaturia we have every reason to hope that a thorough examination of the kidney and pelvis, by means of incisions, will aid us in discovering at an early date the precise nature of the renal condition which has to be dealt with. Whether such an exploration will hasten or retard the growth of a malignant neoplasm is a question to be decided by future experience.

Birmingham.

THE BLUE GUM STEAM TREATMENT OF DIPHTHERIA.

BY J. MURRAY-GIBBES, M.D., M.C., &c.,
CORONER, NEW PLYMOUTH, N.Z.

ON my arrival in England a few weeks ago, I found that my paper on the "Blue Gum Steam Treatment of Infectious Diseases" had been thought worthy of being inserted in THE LANCET, and that it has since been reprinted in Braithwaite's "Retrospect of Medicine." This encourages me to copy out notes of cases of diphtheria I took at the time, as in my former paper I only stated that I had attended and cured so many cases; but before doing so I wish to make a few remarks on the treatment. I have just returned from a visit to Paris, whither I went for the purpose of visiting the hospitals. I had a difficulty at first in gaining admission, and at once went to the English ambassador, who very kindly gave me a letter of introduction to the head of the hospital department, and from him I received a card authorising me to visit every hospital in Paris. Amongst others I visited the Enfants Malades in the Rue de Sèvres, and received every courtesy from Dr. Charcot and Dr. L'Abadie; the latter had two wards devoted especially to diphtheritic patients. So far as the wards were concerned they were perfect, the arrangements good, ventilation and attendance all that could be desired; and yet what do their statistics show? Recoveries one in five. Since January 1st to June 21st, 151 children had had their throats opened, and of these forty-two recovered. In the cold weather they lose most cases. The week I attended the hospital the weather was warm, yet six children died of the complaint. The atmosphere was fumigated with a mixture of eucalyptus oil and tar, which was kept hot by a lamp under it. They use for the throat a mixture which they call diphtheritic oil, composed of salicylic acid, alum, borax, and eucalyptus oil. Dr. L'Abadie asked me what I thought of the ward, &c.; I said, "In the first place, it is too cold; the windows are open and one feels chilled on entering the ward." "Another point," I said, "was of great importance, the ward is saturated with diphtheria; the children's breathing is croupous." In ordinary croup, experience teaches us that a warm, moist atmosphere has the most beneficial effect, and I have found the same in diphtheria. When any organ is inflamed, we use poultices in the immediate vicinity; when the lining of the throat is inflamed hot steam soothes more than any remedy we can use. And how much more important is it to use steam when we have a specific inflammation of the same part! The first indication in any inflammation is to reduce it as soon as possible. In diphtheria we have an inflammation which, if not checked, increases and extends upwards and downwards, and this inflammation becomes the seat, at first in its superficial parts, of the diphtheritic bacteria which form a membrane, covering first the tonsils, and then gradually going deeper and deeper, higher and lower, until the whole breathing tract becomes covered and suffocation gradually comes on. Our great indication of treatment must therefore be to soothe this inflammation, and assist nature in throwing off the false membrane, for it will not grow on a healthy surface. It will not do to let the patient inhale steam occasionally, for this would be like putting on a poultice for only a few minutes at a time and allowing

the part to get cold and the inflammation to again get headway. No, we must have an atmosphere of steam, which the patient must always inhale. One breath of cold air will undo hours of improvement. The moist atmosphere soothes the part, allays the inflammation, and the false membrane becomes loose, just as a scab does when continually poulticed. Assist nature, and follow her method of care, and do not outrage her by using strong caustics or try to take away any membrane when it is firmly attached to the part; but when it is loose then gently remove it with a soft brush, and burn it at once so that it cannot spread the disease to others. Steel has a specific action on the mucous lining, therefore I use a weak solution of it and glycerine by saturating my brush or mop with it. If we apply this roughly we wound the part, and by the very wound we make we allow the bacteria a chance to enter the blood of the patient. In Professor Lister's treatment of wounds every minute detail must be carried out, and it is the same in this treatment of diphtheria. Eucalyptus globulus contains properties which are perfectly antagonistic to the germs of diphtheria. The atmosphere the patient breathes must be saturated with eucalyptus globulus. I tried experiments with various preparations of eucalyptus globulus, such as the tincture, and the essence, applied with a spray producer, but could not detect the characteristic odour in the steam; and then I poured boiling water on the dried leaves, and at once everyone smelt the blue gum. No secondary symptom, such as paralysis, followed in any case. No internal treatment was required, and no stimulants or disinfectants needed. Two of my colleagues in New Plymouth have informed me that they lost all their bad cases of diphtheria in the same epidemic that I saved all mine, therefore I feel perfectly justified in saying that in eucalyptus globulus we have a cure for diphtheria.

Cases of Diphtheria treated with Blue Gum Steam, and Cured.

CASE 1. Dec. 11th, 1881: Miss W——, aged nineteen, has been weak for months with pains in the chest; menses irregular and scanty. On examining the throat, I found a very slight film of membrane on left tonsil, which came away easily on the brush. Had been inhaling blue gum steam for some days, every evening the family having assembled round a tub of it. Feverish; dull pain in the head and shooting pain from the throat to the ears and down the neck, which was tender, but not swollen.—13th: Throat less red; no membrane to be seen.—20th: Breathing slightly laboured; complains of pains under sternum; no membrane to be seen.—22nd: Her mother reports that after I left the breathing became more difficult and croupy, at times gasping for breath; face dusky and lips bluish; throwing herself about the bed. This gradually increased during the night. The steam jugs were changed every half hour, as they thought she would suffocate, when, about 2 A.M., she coughed up a large mass of membrane with immediate relief; the face and lips regained their colour. On examination of the throat to-day I can find no membrane, and she has slept soundly off and on since the membrane was coughed up.—27th: No membrane reappeared; she is gradually getting stronger.

CASE 2. Miss A——, aged seventeen. Dec. 7th: Throat very inflamed, and large patches of membrane on both tonsils and uvula, part of which came away on the brush. Steam had been inhaled for twenty-four hours; pain and difficulty in swallowing.—8th: Larger surface covered with membrane, extending upwards; most of membrane came away on the brush.—10th: Swallowing easier; throat less inflamed.—12th: Membrane on back of pharynx extending downwards; breathing laboured and croupy; face dark; could see membrane low down on the back of the pharynx.—17th: Yesterday morning the breathing gradually became more difficult and laboured, the patient being semi-asphyxiated at times, with the face of a dusky colour and lips bluish. For five hours she inhaled the steam direct from a jug, after which she coughed up a mass of membrane "like the fingers of a glove," her mother told me. Before this she complained of a feeling of constriction across her chest, and her breathing was panting at times. So soon as the membrane came away the breathing at once became easy, and she felt she had got rid of the cause. She said, "The steam saved my life; I could not have lived much longer." What other treatment could have effected this purpose and have saved this patient's life? To-day she is wonderfully better, breathing easy, and only a small patch on each tonsil.—21st: No membrane on throat; appetite improving; and patient sitting up partly dressed.

CASES 3, 4, 5.—Three children of Mr. S——. The membrane on their tonsils and uvulæ was very extensive from the first, and spreading downwards to the larynx, impeding the breathing. The symptoms were similar to the last cases, coming on about the ninth or tenth day of the attack. They all coughed up membrane, when the breathing became at once easy. One peculiarity I noticed in all these cases was that whereas the membrane renewed very quickly on the pharynx, it did not do so in any case when the larynx or lower down was affected.

CASE 6.—I was sent for at midnight to attend a son of Mr. H——, aged about eight years. I found him semi-asphyxiated. The neck was very swollen, and the face dark, evidently showing that the breathing was very much impeded. On examining the throat I found the lining very red and congested, and a small patch of membrane low down on the back of the pharynx; none on the tonsils or the uvula.—6th: Breathing became gradually easier after inhaling steam for hours. Found shreds of membrane in the expectoration; breathing easy.—7th: Breathing natural; no membrane seen. I did not see this case again, the father having informed me he was doing well. Two other brothers were afterwards attacked, and were attended by a colleague, who told me they both died of malignant diphtheria. He did not use steam, but one of the usual treatments. A young relative of theirs was then attacked with the disease. He was attended by two medical men. I was called in a few hours before he died, and found him struggling for breath, tearing at his throat and throwing himself about the bed in his agony. He also had been treated with ordinary remedies.

CASE 7.—A younger brother of this last boy was next attacked. I was sent for. He was aged four. I found the tonsils, uvula, and the back of the throat covered with membrane. I treated him with the blue gum steam and he made a perfect recovery. In a few hours the pain left his throat and the membrane disappeared by the tenth day. The breathing was not affected or the appetite lessened to any extent, for he, like the others, ate bread-and-jam, &c.

CASE 8.—Mrs. M—— (nurse to the last case) was attacked about a fortnight after she first attended the last case. On examining the throat I found membrane on both tonsils. She was a very delicate woman, being seldom out of a doctor's hands, and had been constantly kissing and petting the child she nursed, and had a very severe attack. On the ninth day the breathing was difficult, croupy, panting, and she coughed up large masses of membrane like the first cases; on the fourteenth day there was very little membrane left, and the throat was clear on the seventeenth day.

CASES 9, 10, 11, 12, 13.—Brothers and sisters of Cases 4 and 5. The whole family, eight in number, were attacked, the parents escaping, all having the disease badly. In a boy, aged eighteen, the membrane did not entirely disappear for a month. In none of them did the membrane extend so low as to interfere much with their breathing, except in the infant, aged eight months, and it died. Six of the children were ill at the same time and, owing to the attention they required, and the parents having no one to assist them, they were not able to give sufficient care to it. In fact, I told them that if they gave the attention to the infant it required they must neglect the others, as they wanted constant watching night and day. The others all recovered without a bad symptom, the infant being the only case I lost through the epidemic.

CASE 14.—Mrs. R——, aged fifty. Nov. 30th: She gave me the following history:—Riding to a neighbouring township on Nov. 27th she passed a putrid horse on the roadside and at once felt her throat sore. On arrival at the end of her journey she felt it so bad that she asked a friend to examine it, but nothing was to be seen. I found her very feverish, neck very swollen and tender, especially on the right side, with the submaxillary and other glands enlarged and tender. Her breath was most offensive and tongue foul. She complained of a dull, heavy pain in her head. On examining her throat, I found the whole pharyngeal mucous membrane very congested and swollen, and a dense, firm membrane on and behind the right tonsil of about an inch in length. This was the only patch I could see. It was very adherent and would not come away on the brush.—Dec. 2nd: She has inhaled steam constantly since my last visit, but would not allow her throat to be swabbed. The membranous patch is half the size it was, coming away in

small pieces like grains of rice. The glands of the neck, and the neck itself, are much less swollen, and the breath less offensive and the tongue clean. (I ordered castor oil to all the patients on my first visit.) The difficulty in swallowing is gone, and she feels altogether better.—Dec. 8th: No membrane. She got perfectly well.

CASES 15 and 16.—Two daughters of the last. Membrane on both tonsils, which disappeared on the thirteenth and fourteenth days. Both recovered.

CASE 17.—Mr. J. J——'s daughter, aged thirteen.—Membranous patch on right tonsil. Steam had been used directly she was attacked, twenty-four hours before I saw her. Recovered.

CASES 18 and 19.—Two sisters of the last. Membrane on both tonsils. Recovered.

CASES 20 and 21.—Younger sisters of Case 1. Very little membrane seen. Pharyngeal mucous membrane very congested and neck tender. Recovered.

CASES 22 to 26.—Mr. J——'s five children, ages ten to twenty. Three of these cases were very severe. In the eldest the breathing was very much affected, and was very similar to Cases 1 and 2, and two, aged fourteen and sixteen, had the breathing also affected.—They coughed up the membrane after steaming.

CASE 27.—Miss R. A——, aged ten, younger sister of Case 2, had a very severe attack, the whole back of the throat being covered. I saw her first on December 7th, and on the 20th her throat was clear of membrane.

CASE 28.—Bessie S——, aged six, complained on the morning of November 28th of great pain in her throat and great thirst. The next morning a scarlatina-like rash extended from the navel to the knees, the throat and thirst being better. The rash remained out two days.—Dec. 3rd: Skin peeling in large flakes from affected parts, and also from tips of fingers; throat slightly inflamed.—8th: Both tonsils covered with diphtheritic membranes, mostly removable with brush.—13th: Membrane renewed daily; very little to-day. Recovered.

CASE 29.—Mr. M——'s son, aged two.—May 3rd, 1882: Both tonsils covered with membrane; feverish; breathing easy.—4th: More membrane extending low down.—6th: Less membrane; removable. Recovered. A brother of this child died six hours after I first saw him, on Jan. 23rd, he being comatose and semi-asphyxiated.

CASE 30.—Mr. F——'s child, aged ten.—Dec. 10th: Large patch of membrane on left tonsil. Had been inhaling steam four days. Recovered.

CASES 31 and 32.—Two sisters of last. Both tonsils covered; reappeared for thirteen days. Recovered.

CASE 33.—Mr. F——'s child, aged four.

CASE 34.—Mr. J. C——'s child, aged four.

CASE 35.—Mr. C——'s child, aged five.

CASE 36.—Mr. J——, aged twenty-two.

CASE 37.—Mrs. ——, aged twenty-two.

REPORT OF TWO EXPERIMENTAL TRANSFUSIONS ON DOGS,

PERFORMED IN GUY'S HOSPITAL LABORATORY.

BY CHAS. EGERTON JENNINGS, L.R.C.P. LOND.,
FORMERLY HOUSE-PHYSICIAN AND RESIDENT ACCOUCHEUR AT THE LONDON HOSPITAL.

IN previous communications I have endeavoured to draw a marked distinction between the indications for the intravenous injection of saline fluids and for the transfusion of blood, and have suggested that, whenever admissible, the former should be chosen in preference to the latter method, which is necessarily a complex procedure, and if imperfectly performed a dangerous one. Conceiving that the chief objection to direct transfusion lies in the risk of coagulation of the blood *in transitu*, I have published[1] the description of a syphon apparatus designed to remove this source of danger, by causing the donor's blood to mingle with more than an equal bulk of saline fluid, immediately after quitting the efferent cannula—i.e., on entering the connecting-tube. The chance of coagulation might be further lessened by employing a saline fluid at about 75° F., instead of at blood-heat. The fluid, too, might contain a small percentage of ammonia, as an additional precaution. The vascular system of the donor could be repleted by the substitution of saline fluid for the blood transfused. With the view of determining these points, I have performed, by the courtesy of Dr. Pye-Smith, two transfusions in his laboratory at Guy's Hospital, one of the few places licensed for experiments on animals in the United Kingdom.

Experiment 1.—July 30th: The operation was performed under mixed narcosis, slightly modified from that figured in THE LANCET,[2] and charged with an ammoniated saline fluid.[3] The small size of the animals, the donor weighing 15 lb. 9 oz., and the recipient 12 lb. 4 oz., involving the employment of cannulæ smaller in bore than would be selected for the human subject, coupled with the greater tendency of the blood of the dog to coagulate, as compared with that of man, the anatomical relations of the jugular vein[4] of the dog, and its close proximity both to the heart and to the brain, conspired to render the operation somewhat more difficult than it would be in actual practice. Transfusion was established between the right external jugular veins of the two dogs, the recipient being simultaneously depleted. Saline fluid was then substituted for the blood lost by the giver. The afferent cannula was of No. 1 size, the efferent No. 2.[5] After the experiment the recipient was found to have *lost* 2½ oz. (this being the difference between the blood lost by venesection and the mixed fluid gained by transfusion), and the giver to have *gained* 1½ oz. in weight (due to the saline liquid injected). About 10 oz. of saline fluid had been injected into the dogs, and about 3 oz. of blood were collected from depletion of the receiver, besides about half an ounce which was lost. The donor, whose vessels were surcharged, began moving about the more briskly on recovering from the anæsthetic. The recipient, which had been more deeply anæsthetised than the giver, also recovered perfectly, though continuing drowsy from the effects of the morphia for some time. Both dogs were killed the same afternoon.

This experiment conclusively proved that blood would mingle rapidly and completely with saline fluid in the junctional tube of the instrument, and, so far as it went, showed—first, that coagulation of the blood did not occur in its passage from giver to receiver; nor were any coagula found within the instrument after the cannulæ had been withdrawn from the veins of the animals; and, secondly, that the saline fluid facilitated the flow of blood, and could be directed into the vein of either dog at will.

The experiment showed, further, that to tap the vein of the donor with a trocar and cannula, as proposed, is impracticable. Unless they be made to fit each other with extreme accuracy, I am convinced that a trocar and cannula would be useless for transfusion purposes. On grounds of convenience I tried the trocar; by having devised a phlebotome (Fig. 1), which greatly facilitates the insertion of cannulæ into veins, I have discarded the former instrument as unnecessary. Therefore a modification of the apparatus, in the direction, of simplicity has been made. This must be described in detail before narrating the experiment in which it was employed.

The phlebotome is a small instrument, combining the advantages of a knife, hook, and director. Its blade, which is pen-shaped, is set at a right angle to the shaft. The upper surface of the blade is slightly convex both from side to side and from before backwards. The anterior third of the lower surface is plane, the middle third slightly concave from side to side, and the posterior third deeply so, in order to afford a suitable guide for the cannula. As in making a corneal section for cataract with a Beer's knife the aqueous humour cannot escape, so in puncturing a vein with this phlebotome, provided only the anterior third of the blade of the instrument be introduced within the vessel, no blood can emerge. Fig. 3 shows an enlarged view of the junctional tube interpolated in the syphon (Fig. 2) at C. The efferent cannula is intended to plug on to the aperture (D). Communication can be established or cut off between the efferent cannula and the junctional tube by partially withdrawing or closing the inner tube (E). A mechanical arrangement exists to prevent the outer and inner tubes from coming

[1] THE LANCET, March, 1883.

[2] Loc. cit.

[3] Vide On Transfusion of Blood and Saline Fluids (Baillière, Tindall, and Cox).

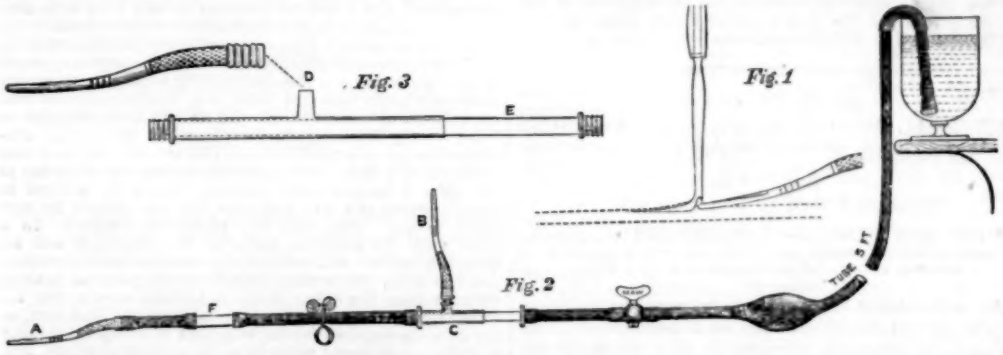
[4] This being the vein chosen for the experiment.

[5] Cannulæ have been made for me of the following sizes, No. 3 having the largest calibre:—3, 2, 1, ½, ¼.

entirely apart.[6] In the preceding experiment, a junctional tube of glass, with the communication between it and the efferent cannula not capable of being made or broken at will, was employed. The fact that the blood and saline fluid would satisfactorily mingle having been determined by observation through it, the necessity for a junctional tube of glass, instead of metal, no longer existed.

Experiment 2.—Aug. 8th: The syphon was charged from a receptacle of saline fluid (78° F.), each pint of which contained ten minims of liquor ammoniæ, and the following salts in solution:—Chloride of sodium, 50 grs.; chloride of potassium, 3 grs.; sulphate of soda, 2·5 grs.; carbonate of soda, 2·5 grs. The communication between the efferent cannula and junctional tube was shut off. The experiment was performed, like the last, under mixed narcosis. The recipient weighed 20 lb. 1½ oz.; the donor, 15 lb. 1½ oz. Immediately after the (left) external jugular vein was exposed, its sheath was opened with the scalpel.[7] The wall of the vein was punctured, and slightly elevated with the phlebotome, the afferent cannula (No. 2 size) being quickly introduced beneath it. The cannula was secured *in situ* with a ligature. After a lapse of some time it occurred to me that a coagulum might already have formed about the aperture of the afferent cannula, from blood within the receiving vein, saline fluid not having been allowed to flow, since the dog was not yet depleted. The removal of the cannula to ascertain this point proved that such was the case. The coagulum having been removed, the cannula was reintroduced within the vein, and the formation of a fresh coagulum provided against by allowing saline fluid to pass *guttatim* at short intervals. Depletion from the vein on the distal side of the cannula was effected, but the flow of blood was tardy. By opening the sliding tube (C), the rubber tubing being closed near the afferent cannula (A) by the burette clip, the saline fluid emerged from the efferent cannula (B). The flow was now arrested by the stopcock, and the efferent cannula (No. 2 size) was inserted into the right external jugular vein of the donor. The cannula being of a conical form, it was first maintained *in situ* by pressure; but blood escaping by the side of the instrument, it was finally secured with a ligature.[8] On relaxing the pressure made on the tubing by the burette-clip the donor's blood rapidly passed through the connecting tube, pressing the saline contained therein onwards. The contents of the glass interruption rapidly became of a deep mulberry colour. Mr. Golding-Bird, who at this moment kindly regulated the stopcock for me, turned on a little fluid. The chief interest in the experiment lay in allowing the saline fluid to mingle with the blood in various proportions, the amount of the dilution of the blood being obvious by the various and rapid changes of colour the fluid in the glass tube (F) could be made to assume. When the first convulsion of the facial muscles of the donor occurred[9] the flow of blood was arrested by suddenly increasing the pressure of the saline, which now entirely displaced the blood in the instrument. The flow through the afferent cannula was stopped, the saline fluid coursing through the efferent cannula (B), and thus repleting the donor's vessels. The experiment was concluded by removing the instrument, and noting that no coagula existed within it. The quantity of saline fluid injected into both dogs was sixteen ounces, only two ounces of blood had been collected from the depletion of the receiver in a vessel, but some had been lost. Some blood was lost from the donor's vein, and also some saline fluid by slight leakage from the junctional tube.[10] The receiving dog, which had gained five ounces[11] in weight by the experiment, recovered, though it remained drowsy from the effects of the morphia for some time.

In order to test the instrument further an additional experiment was performed on the donor, still anæsthetised. The efferent cannula of the syphon, charged with saline fluid, was inserted into this dog's left jugular vein, the animal being depleted through the connecting-tube. The blood, on passing the afferent cannula, mixed with saline fluid from the syphon, was received under fluid. A slight convulsion occurring, the dog was repleted with saline fluid, then more blood was drawn and saline substituted for it. The quantity of blood and saline fluid mixed, which was collected in the basin after this experiment, measured nine ounces; the total quantity of saline fluid employed was fourteen ounces. The jugular vein and other bleeding points were ligatured and the wound closed with sutures. A little blood mixed with saline fluid had been left in the connecting tube of the syphon. On being now examined coagulation had begun. The dog was then allowed to recover and run about. It had lost half an ounce in weight by the two experiments. Both animals were soon afterwards killed. It was suggested that possibly the saline fluid infused into the dogs had transuded from their vessels their serous cavities. To ascertain whether this fallacy existed, the peritoneal, pleural, and pericardial cavities of the animals were examined post mortem, but no effusion was found.



For valuable assistance in the first of these experiments, I am indebted to Dr. Fenton-Jones, and in the second to Dr. Golding-Bird. Nor must I omit to state that the success of the experiments was largely due to the admirable physiological appliances which were placed at my disposal.

Propositions:—1. That by this method there is no danger of coagulation of the blood occurring *in transitu*, if ordinary care be observed in the performance of the operation. 2. That to substitute saline fluid for transfused blood is practicable. 3. That depletion, with simultaneous transfusion, is indicated in some cases of poisoning, notably opium poisoning, and, probably, for many conditions not yet determined, by this process, the vitiated blood being removed and the equilibrium of the vascular system restored. 4. That if, in any case, the admixture of more than an equal bulk of saline fluid with the blood in the connecting tube of

[6] This contrivance is omitted from the diagram, which is of small scale, in order to prevent confusion. The telescopic tube employed in the forthcoming experiment was a brass model, very hastily made for me by Krühne and Sesemann.

[7] In order to avoid the chance of introducing the phlebotome between the sheath of the vein and its anterior wall. One other possible error might be committed, which need only be known that it may be avoided—viz., the phlebotome might be thrust through the posterior as well as through the anterior wall of the vessel, and the cannula introduced between its posterior wall and its sheath.

[8] The absolute necessity of ligating cannulæ within veins was thus demonstrated. In actual practice this step, though painful to the donor, should never be omitted.

[9] This took place quickly, since the blood was flowing directly from the nervous centres.

[10] The tube employed being a rough model, but tubes similar in outline have since been made free from this fault.

[11] The transfusion being so much in excess of the depletion.

the instrument be objectionable, fibrination may still be prevented by employing a smaller proportion of a more highly ammoniated solution than was used in these experiments.

[I receive confirmation in the belief that the syphon principle on which my instrument is constructed is the right one by the fact that it has been adopted by no less an authority

Fig. 4

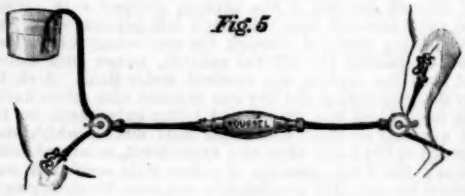


Fig. 5

than M. Roussel. The above diagrams show, first, M. Roussel's well-known instrument; and, secondly, his modification of it, which has been illustrated in a recent number of the *Journal de Médecine de Paris.*]

AN ACCOUNT OF THE

GENERAL HOSPITAL, INDIAN DIVISION, EGYPTIAN EXPEDITIONARY FORCE, AT SUEZ,

FROM AUG. 25TH TO OCT. 13TH, 1882.

BY BRIGADE-SURGEON J. H. THORNTON, L.M.D.,

LATE IN MEDICAL CHARGE OF THE GENERAL HOSPITAL, INDIAN DIVISION, EGYPTIAN EXPEDITIONARY FORCE AT SUEZ.

As public interest has been so much aroused by the recent inquiry into the state of the hospitals at Ismailia and Cairo during the late Egyptian campaign, a short account of the General Hospital of the Indian Division at Suez may not be out of place, especially as this hospital has hitherto remained almost entirely unnoticed. It was at first established in the buildings of the Victoria Hospital at Suez, but on Aug. 27th, 1882, it was removed to the P. and O. steamer *Hydaspes*, in Suez docks. The number of sick transferred to the *Hydaspes* was as follows:—

Sick of British troops (2nd Batt. Seaforth Highlanders)	10
Sick of Native troops	16
Sick of Native followers	3
Total	29

The *Hydaspes* had brought over cavalry, and was entirely unprepared to receive sick, as the horse-fittings had not been removed from her main deck. By the kindness of Captain Hext, R.N., Superintendent of Naval Transport at Suez, I obtained the services of some carpenters, who at once proceeded to remove the horse-fittings and to fit out the main deck with beds, &c., in accordance with my directions. The sick were kept on deck as much as possible while this work was going on. The *Hydaspes* is a steamer of 2984 tons, 375 feet in length and 38 feet broad; she has a flush deck fore and aft, with plenty of space, and a main deck provided with numerous large ports admitting free ventilation. A considerable part of the main deck is occupied by the engine-room and boilers, but there is a large space in front and on each side. This space was used for the hospital, and 100 wooden beds were constructed in it of such height as to place the occupants almost on a level with the ports, so as to get the utmost advantage from the breeze blowing through them. Fifteen of these beds, on the port side of the ship, were entirely separated from the rest, and were devoted to the use of the sick European soldiers and their attendants, while the remaining beds, eighty-five in number, were given to the native sick. The orlop decks, fore and aft, were also placed at my disposal, but were only used for stores, as they were unsuited for hospital purposes, having no ventilation except through the hatchways. A small dispensary was constructed on the main deck close to the fore hatchway, and an operation table was made. This was surrounded by canvas curtains so as to form a room for operations, examination of patients, and such like purposes. When not in use the curtains were rolled up so as not to interfere with ventilation. The situation of the ship was very convenient; she was moored close to the sea wall on the south side of the Suez docks, and presented her broadside to the prevailing wind, which blew through her large ports, ventilating the main deck so thoroughly that even at night, when every bed was occupied, I found on visiting the hospital that the air was sweet and not the slightest odour perceptible. As she was close to the shore and provided with suitable gangways, I ordered all cooking to be done on land, and I had latrines dug at a short distance, instead of allowing the ship's latrines to be used. By these means, and by the liberal use of disinfectants in the hospital, the sanitary condition of the ship remained perfectly good from first to last. Condensed water was supplied to the sick from the ship's condensers; the supply was ample and of good quality. The rations supplied by the commissariat department for the use of the sick were of good quality throughout, and I had no occasion to find fault with anything. Although the heat in the daytime was considerable, the thermometer on deck frequently indicating a temperature of 100°, the nights were cool and pleasant, and the climate appeared to be very healthy. The sick rapidly improved, especially those sent down from the front, and hardly any cases took an unfavourable course. It was at one time proposed to bring up the *Hydaspes* to Ismailia; but, taking into consideration the superiority of the climate and sanitary conditions at the Suez docks and the convenient situation of the ship, I recommended that she should be allowed to remain where she was, and that the sick should be sent down to her. This plan was ultimately adopted. In a short time the available space in the *Hydaspes* was all occupied, and the sick subsequently received were accommodated in tents, which were pitched on the shore at a short distance from the ship. Early in October orders were received for the removal of the hospital from the *Hydaspes*, as the ship was required for the transport of cavalry returning to India. Additional tents were accordingly obtained, and the hospital was removed from the *Hydaspes* to the tents, where it remained until all the sick were disposed of by transfer to their respective corps as they arrived at Suez on their way back to India. The sick native followers, ninety-four in number, were placed on board the transport *Avoca*, under my charge, for conveyance to Bombay. They nearly all recovered during the voyage; only one of them died at sea; and the few remaining sick on arrival at Bombay were sent to the hospitals of that city. The total number of patients treated on board the hospital ship *Hydaspes* from Aug. 27th to Oct. 11th was as follows:—

Officers	3
Sick of British troops (2nd Batt. Seaforth Highlanders)	10
Sick of Native troops	130
Sick of Native followers	180
Total	323

The principal diseases among the fighting men were ague, dysentery, and venereal affections. Very few of the cases were severe, and none proved fatal. Some cases of conjunctivitis occurred, but none of them were of a severe type. There were four cases of gunshot wounds, of which only one (a gunshot wound of the right forearm, missing the bones) could be considered severe. There was also one case of sword wound of the chest, in which only trifling injury had been inflicted. A few cases of bronchitis, pneumonia, and pleurisy were received, mostly slight, and requiring no particular notice. One of the officers suffered from typhoid fever, probably contracted on board the transport in which he came from Bombay to Egypt; his case was serious, but

it ran a favourable course, and he was discharged to rejoin his corps on Oct. 10th.

The principal diseases occurring among the native followers were ague, dysentery, ophthalmia, ulcers, and venereal disorders, and they suffered from these affections much more severely than the fighting men. Many of the followers appeared to be weak and sickly men, who should not have been allowed to accompany the expedition at all, and most of them seemed to have contracted a slight scorbutic taint from the combined effects of hard work and insufficient and monotonous diet. Lime-juice of course was freely used in these cases, but fresh meat seemed to be of greater value, not only as nourishment, but as an antiscorbutic. Some of the cases of dysentery among the followers proved very intractable and resisted all treatment; nearly all of them were saved by careful nursing and plenty of nourishment, but one proved fatal. This was the only fatal case that occurred in the General Hospital from August 25th to October 13th, the period during which I was in charge. The solution of nitrate of silver (ten grains to one ounce) proved effectual in most cases of ophthalmia when taken in time, but in one unfortunate instance vision had been destroyed before the patient applied for treatment. Most of these cases seem to have occurred through the agency of dirt and flies, the men generally neglecting to wash their eyes and to prevent flies from settling upon them. Two cases of Guinea-worm occurred, but they presented no features of interest. I watched for cases of hæmaturia from the presence of the bilharzia, but met with none.

In conclusion, I may mention that Rear-Admiral Sir William Hewett, K.C.B., V.C., commanding at Suez, frequently visited the General Hospital in the *Hydaspes*, and approved of all the arrangements.

Monghyr, Bengal.

LIVER ABSCESS PRECEDED BY ACUTE, AND ACCOMPANIED BY CHRONIC, DYSENTERY; CURE.

BY J. H. BRANNIGAN, L.R.C.P., L.R.C.S. EDIN.

THE following is a short report of a case that came under my notice in April of last year, which from the serious nature of the complaint and the simplicity in the method of its treatment I think worthy of record.

Early in the month above mentioned I was summoned by the American mission to see a certain Giorgis, native of Luxor, on the Nile, Upper Egypt. He was *en route* for Cairo accompanied by his aged father, there to seek advice and treatment at the hands of some European surgeon. Hearing from the Rev. Dr. Hogg, chief of the American mission in Egypt, that there was an English surgeon at hand the father and patient begged that I might at once be called in.

Appearance of patient on visit.—The patient, aged eighteen, was tall and greatly emaciated, wore an extremely anxious expression, face mottled, conjunctivæ slightly if at all jaundiced, voice feeble—in short, much debilitated.

History of case.—Six months ago he had an attack of dysentery; this finally became chronic. In the early part of January, 1882, the patient began to complain of pain in the region of the liver, associated with fever, sometimes absent, but always returning, especially in the evening, accompanied by perspiration. He sought advice, and was frequently blistered over the seat of pain. Later on, inability to retain food, which was shortly vomited after taking it. Difficulty in breathing was also noticed; breathing was laboured, "thick" as he called it. Prostration went on, and stools to the number of three or four per diem were passed. The temperature was now taken (102° F.); pulse 90. On inspection the abdominal region showed distinct swelling at the epigastrium, and slightly to the left of the middle line. Palpation could not detect fluctuation, but made out an annular hardness on the surface of the tumour, with a depressed centre, easily felt through the abdominal walls.

Diagnosis.—Taking into consideration the history of the case—viz., attack of dysentery some months previously, and now in existence as chronic; presence of a tumour; remittent nature of the fever,—I concluded it was one of liver abscess situated in the left lobe.

Exploratory examination.—A fine exploratory trocar and cannula (made by Collin et Cie., Rue de l'École de Médecine, Paris) was inserted at the most prominent seat of the tumour, where I was of opinion adhesions had set up with the abdominal parietes. On withdrawal of the trocar I waited anxiously a few minutes, and was pleased to see a thick creamy chocolate-coloured pus appear.

The patient and his father seeing my statements verified by the exploratory examination, no longer mistrusted, but implored me to open the abscess at once. I promised to do so next morning. The question was (*a*) aspiration, or (*b*) free incision. The first was not possible, as there was no aspirator. The second, free incision at the seat, where I was confident adhesions had formed, seemed to specially commend itself, aided by the Lister spray. Having no spray apparatus, I adopted a method that would minimise the danger of septicæmia—i.e., insertion of a moderately large-sized trocar and cannula. The night preceding the operation the patient was very feeble after walking to my house from the American mission; felt sick, and complained of the old pain in the hypogastrium. Temperature 104° F.; face flushed, and large beads of perspiration over the forehead. I gave the patient some milk, beaten up with an egg and an ounce of whisky. Sent him to bed in my own house, his future hospital. 8 A.M.: The patient passed a restless night; temperature 102° F. The dressings having been prepared—viz., cotton-wool, saturated in 1 in 20 carbolic acid lotion, and some folds of Lister's antiseptic gauze, with oiled silk,—I carefully sponged the abdominal surface with 1 in 20 carbolic lotion, selected the point of annular hardness, raised up the skin, and made an incision, in order to render penetration of trocar and cannula painless. I then took out of a solution of 1 in 20 carbolic acid lotion the trocar and cannula, drove them well into the tumour, and withdrew the trocar. Immediately more than two pints of healthy pus, mixed with liver débris, came away. No more pus coming, the parts were carefully sponged with 1 in 20 solution of carbolic acid, tied in cannula, and placed a piece of oiled silk round it at the orifice of the wound, to obviate any absorption of pus; carbolised cotton-wool was placed round to prevent any filtering of pus at the edges of the dressing; over the whole the Lister gauze was placed, and kept *in situ* by a large towel passed round the body and fixed at the side by three safety pins. The patient expressed himself much relieved, and shortly after took some milk beaten up with egg and whisky. 8 P.M.: Dressing removed; a few ounces of pus had oozed out of cannula. I applied a fresh dressing after cleaning the parts carefully in 1 in 20 carbolic acid lotion. Temperature 103° F.; sweating on forehead slight; no pain, no sickness; had had milk and some chicken broth. The usual dressing was continued twice daily, the pus still continuing healthy. The cannula remained in twelve days without causing any irritation save a slight blush at the point of insertion. Attention was paid to the diet, and stimulants in the shape of claret were given. The discharge had now almost ceased; the swelling disappeared, and one morning the cannula was found two-thirds out and no discharge visible. I removed the cannula, replacing it by a drainage-tube previously dipped in 1 in 20 carbolic acid solution. Examination of the cannula showed the part that was in the abscess to be discoloured by the bile acids. Temperature never varied from 99° A.M. to 101° P.M.; pulse 75 to 80. The appetite was good, and food in the shape of milk, eggs, and chicken broth was partaken of with relish. The breathing became free, and the sickness ceased from the day the abscess had been evacuated. Third week: The dressing tube was now difficult to introduce, and no discharge visible; still I could detect a slight return of swelling, there was a rise of fever, and an outbreak of perspiration over the forehead. I reintroduced the trocar and cannula, previously dipped in a 1 in 20 carbolic lotion, withdrew the trocar, and about three ounces of pus, mixed with liver débris, came away. This was the last discharge in any quantity. The case went on rapidly well, and in twenty-three days the patient left cured, restored in flesh and strength—a different person to what he was when first seen.

About this time I saw in THE LANCET some reports on the use of nitrate of silver in enema in a case of chronic dysentery. At the end of the second week I gave an enema of twenty grains of nitrate of silver to three pints of tepid water, without any effect. Then an enema later on of forty grains to three pints of water. Stools were less. Finally I gave sixty grains of nitrate of silver to three pints

of water, and although the fluid was retained about four minutes it caused no pain. After this stools, three, two, and one, of more solid consistence, were passed, and before the patient left he had not more than one stool daily, and that healthy in appearance. All through the pus was free from smell and quite healthy.

CASE OF DIABETES; DEATH THIRTY HOURS AFTER FIRST VISIT.

BY ED. GEO. WHITTLE, M.D. LOND., &c.

SHARING in the general sympathy which the harsh censure of Dr. Blades has evoked from the profession, I am induced to send you the following report.

On Monday, June 25th, I was called to see a man whom I found lying helpless in bed, with his feet hanging over the side and uncovered, as though he had failed in an attempt to get back. He looked about thirty-five years of age, muscular, spare, but not emaciated; his hands and feet were cold and cyanosed; his breathing was laborious, rapid, and deep; he could answer questions, but so slowly and with such evident effort, that I put no more than were needed to ascertain that he had his mental faculties. The pupils were equal; there was no paralysis, but when the eyelid was raised, it fell back sluggishly. Chest walls were highly resonant, and the respiration was everywhere loud, harsh, and bronchial, expiration being almost as loud and long as inspiration. Heart healthy. Mucous membrane of lips and eyelids red. Tongue dry and brown. Throat dusky red, with vesicular eruption on soft palate. Pulse 140; temperature 97·8°. Urine (none saved) reported to be healthy in appearance; micturition normal. There was neither œdema nor anæmia. The case was clearly one of diabetic dyspnœa, running rapidly to a fatal issue. He soon became unconscious, passed his urine in bed, and died on the evening of the next day. I certified without having examined the urine.

The following is the history as obtained from his wife. Had always been healthy and temperate. A year ago he was treated for an attack of diarrhœa, but had had no medical advice since, nor had he missed a day's work (shoemaking). On June 19th, a week before death, he had sore-throat. On the 21st his wife wished to send for a doctor, but he said there was no need, as his throat was getting better. For some few weeks he had occasionally complained of fatigue, which he attributed to the hot weather. His sight was slightly impaired. This, he thought, was due to sitting too closely at work. He worked as usual on the 23rd (Saturday), but in the evening felt tired and drowsy. The next morning he felt as well as usual, but his wife induced him to remain in bed for the sake of rest. He had no symptoms causing anxiety to himself, and it was only on account of his throat that his wife wished him to have medical advice. On the 25th he arose at 6 A.M., and his wife observed that his breathing was short while dressing. About 1.30 P.M. I saw him in the condition above described.

Remarks.—Having the advantage of the knowledge derived from a study of Dr. Blades' case and a paper read by my friend, Dr. E. Mackey, in which the diagnosis between hysteric, uræmic, and diabetic dyspnœa was ably pointed out, I was saved all trouble in diagnosis. To remove all doubt, however, I drew off some urine after death. It contained albumen and sugar in abundance. I am not ashamed to confess that had this man consulted me on the Friday evening before his death he might possibly have left me with his glycosuria undetected. Very few men in general practice examine the urine at a first consultation as a matter of routine; but unless this rule be observed, anyone may overlook an obscure renal affection, accepting the suggestion of the patient that his malaise is due to overwork, confinement, heat of the weather, &c. Are we to be held almost criminally responsible in such cases when the inevitable and natural sequence occurs without its having been prematurely announced? Are we who have the most complex and inconstant phenomena of disease to interpret never to be forgiven an oversight? We cannot avoid them. He who asserts that he cannot err must have had but little experience in the practice of medicine, and I should be sorry to trust myself to his infallibility. Are not most cases of glycosuria, as of albuminuria, already chronic when they first come under notice? Is it not often impossible to assert when they began? The above case will be classed by many as "acute diabetes"; but if I assert that the man may have had glycosuria for many years, who is to prove the contrary?

Brighton.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nullam autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST.

MOVABLE TUMOUR IN THE ABDOMEN, SIMULATING MOVABLE KIDNEY; NECROPSY; DISPLACEMENT OF LIVER.

(Under the care of Dr. EUSTACE SMITH.)

FOR the notes of the following case, which is of considerable interest from a diagnostic point of view, we are indebted to Mr. T. H. Waller, M.R.C.S., L.R.C.P. Lond., resident medical officer.

J. S——, aged thirty-four, married, was admitted on June 4th, suffering from advanced phthisis and laryngitis. While in hospital she drew attention to a lump in the right side of her abdomen, which she had noticed for the first time after her last confinement three years previously. It caused her no inconvenience whatever—no pain except on pressure, and then very slight. She had noticed that it often shifted about from one place to another.

On examination, a tumour was felt in the right side of the abdomen, below the margin of the ribs, with the following characters: It was solid, firm, oval in shape, with the long axis parallel with that of the body, and easily movable. When the patient lay on her back, the tumour could be grasped between the thumb and fingers in the right loin, but when she turned on her left side the tumour could be felt in the middle line of the abdomen, returning to its original place immediately the patient lay on her back again. The right kidney could not be felt positively in its natural situation. There was no dulness below the edge of the ribs in the natural position, but when the tumour was pushed forward to the anterior surface of the abdomen, it was found to be dull. The urine was examined several times, and always free from albumen, but contained latterly an abundant deposit of urates. There was no history of any urinary trouble. The tumour was thought undoubtedly to be a "movable kidney." The patient died on July 25th.

Necropsy.—The right lobe of the liver extended three inches and a half below the level of the ribs, reaching downwards just below the highest point of the crest of the ilium; from its emergence from under the ribs downwards, it nowhere measured more than an inch in thickness. Following the same mode of examination, the movement of this part of the liver corresponded in every way with what had been felt during life: when grasped between the thumb and fingers this part of the liver was folded upon itself, thus giving the tumour the oval shape, and the resemblance to that of the kidney. When removed the liver weighed 48 oz., and was healthy. The gall-bladder contained three gall-stones, the size of ordinary marbles, with several well-marked smooth facets on each. The gall-bladder was full, but not distended; the duct leading from it was occluded, not admitting the largest end of a post-mortem needle further than its entrance. The right kidney was in its natural situation, and healthy.

LEICESTER INFIRMARY.

NOTES ON A CASE OF HYDROPHOBIA PRESENTING SOME PECULIAR SYMPTOMS; NECROPSY; REMARKS.

(Under the care of Dr. COOPER.)

FOR the following notes we are indebted to Mr. C. J. Bond, F.R.C.S., house-surgeon.

A healthy agricultural labourer, aged fifty-six, was bitten by a large retriever dog, on Jan. 20th, 1883, on the left

hand. The wound, or at least one of the scratches, continued in an inflamed discharging state for some time, and, in fact, was only soundly healed fourteen days before admission. The man, however, paid but little attention to it, and went about his work as usual until April 16th, when he began to get rather nervous and fidgety about his hand. On the 19th, on getting up in the morning to go to his work, he felt pain in his chest and some difficulty in breathing, and also in swallowing, and he also vomited; this nervousness and pain on swallowing increased on this and the following day, and he was admitted into the infirmary on the morning of April 21st, when his condition was noted as follows:—The patient is a strongly made, florid man. He lies quietly in bed, and answers questions quite rationally. He does not attach any importance to the bite, which shows no signs of redness or inflammation, and has apparently no suspicion of the nature of his disease, though he expresses himself as feeling very ill. Although generally quiet, the noise of falling water poured out, out of his sight, causes him to sit up in bed; his face assumes an anxious, frightened look, the respirations become quick and snatchy, and he implores that no fluid may be given him. When a glass of water is put into his hand and he is asked to drink, he seems agitated, says that he is not afraid of it but cannot drink; he raises the glass a little, then shudders and pushes it away, complaining at the same time of pain at the epigastrium and base of chest. As he lies quietly in bed the respiration is from 16 to 20 per minute; pulse 110, varying somewhat in force and frequency from time to time, the occurrence of a period of excitement increasing its frequency and lessening its force, and producing irregularity in the rhythm, and intermission occasionally occurring. He is able to open his mouth widely and keep it so when asked, the pupils are equal, and react to light, there are no spasms in the sense of any tonic contraction of any muscle or group of muscles, and the temperature at this time, 11 A.M., is 98°. Urine acid, sp. gr. 1025; no albumen. 6.30 P.M.: After several unsuccessful attempts patient has now passed over half a pint of urine, which contains a trace of albumen. The act of micturition caused no spasm or inconvenience to the patient. 7.30: Patient is now very restless and seems in a jovial mood, he tries to shake hands, kicks off the bedclothes, and as the attacks (that is, the feeling of agitation and oppression, the hurried breathing, and the quickened pulse) come on, he grasps the hand of a bystander, saying that he is thus much relieved; he very frequently spits out frothy saliva very energetically, as though afraid to retain it in his mouth. 12.30 (midnight): Patient has changed considerably, sits up in bed almost constantly, is still conscious and wishes to see his friends; his face has, however, a very anxious and, at times, a startled expression, and he is constantly spitting out a mixture of frothy, blood-stained mucus and saliva on to the floor, refusing to spit into any vessel. Respiration is now more frequent, and accompanied with bronchial and tracheal râles, and temperature has risen to 99·2° in rectum.—22nd, 11 A.M.: The mental condition of the patient is gradually more resembling that of mania. His face is flushed; the conjunctivæ suffused. He is much less sensitive at the approach of strangers, and pays no attention to the sound of falling water, though he still refuses to drink. Water, poured into his mouth, causes no spasm, and he occasionally swallows saliva; the plantar reflexes are abolished; knee-jerk present in both legs, and both testicles are much drawn up. The constant spitting of mucus and saliva continues, though the former is not now blood-stained. The respiratory sounds are clearer, and there is occasional vomiting of a green, bile-stained fluid. The temperature is now, noon, 104·4°. 3 P.M.: Patient is now unconscious; his face is very dusky; the vomiting of this green fluid is almost constant; pulse very quick and feeble, but regular. At 3.15 P.M. respiration ceased while patient was in the act of vomiting. The temperature in the rectum, forty-eight minutes after death, was 107° F., and rigor mortis was well marked two hours after death.

At the post-mortem examination it was found impossible in this case, as in previous ones, to associate each symptom with a definite pathological lesion. The blood was found coagulated, not fluid as usually described; little or no endocardial blood-staining, so common in septic diseases, and no change which could be called specific was observed by the naked eye in any organ, except that on making sections through the spinal cord and medulla; the latter and the cord as far as the lower cervical region appeared softer and redder than in the dorsal and lumbar regions. Microscopical examination of the blood at various stages of the disease (by Koch's method) showed nothing abnormal beyond division of the nuclei in the leucocytes and some round deeply stained refractive bodies aggregated together, which might or might not have any specific importance. Examination of the saliva during life, and from a fresh section of the gland immediately after death, showed nothing beyond the usual organisms associated with that secretion when obtained from the mouth. Sections of the sublingual gland stained with logwood showed marked injection of the organ, with numerous granular bodies among the epithelial cells, which resembled leucocytes. Sections of the hardened medulla and cervical cord certainly showed an injected condition of the grey matter, with numerous granules and extravasation of leucocytes around the vessels, as described by Dr. Gowers. Further, considerable difficulty was experienced in hardening the medulla and cervical portion of the cord in Müller's fluid; not so in the lumbar region.

Remarks.—In order to correctly estimate the value of the cerebral symptoms in this, as in any case, it is necessary to remember that the patient was a strong, steady farm-labourer, a man in whom the nervous system (as in most men of that class) was previously to the disease in a condition of very stable equilibrium; and although apparently a little nervous about the bite before his illness, he ceased to attach any importance, or to allude to it, after his admission. Regarding the disease as due to some poison acting on the central nervous system, it would seem that in the order of time the respiratory centre was the first to be affected by it, then the cardiac, and, finally, perhaps the vomiting centre. Further, the irregularity and intermission of the pulse, so marked in the early stage, quite passed away before death, and, though cerebral function was much exalted at times, the mental dread of water also quite passed away. Bearing on the selective action of the poison on the medulla is the fact that there was no great radiation of stimulus, no tetanoid spasms, the most marked fit merely resembling the action of a person when getting into a cold bath, together with a superadded emotional condition as though an impression were produced on the respiratory centre like that produced by cold affusion; how far the mental state is one of association or of distinct cerebral poisoning yet remains to be proved. Another feature is that the temperature, said to be usually raised one or two degrees, though normal on admission, rose gradually to 99·4° in twelve hours, to 104·4° in twenty-four hours, and was 107° in the rectum forty-eight minutes after death.

Any detailed description of the treatment adopted has been purposely avoided, for this case, like every other, shows that we have not yet discovered any specific for hydrophobia; at the same time the patient was evidently saved a large amount of mental dread and pain from the administration of chloral and morphia in large and frequent doses, the former by rectal injection, the latter by hypodermic injection.

MANCHESTER WORKHOUSE, CRUMPSALL.

NOTES ON A CASE OF HYSTERICAL (?) HEMI-ANÆSTHESIA IN A MAN.

FOR the following interesting notes we are indebted to Mr. C. B. Voisey, M.R.C.S.

W. M——, a strong and powerful-looking man, was admitted on March 8th, 1883, in such a weak-minded and melancholic condition that it was some days before anything like a rational history could be elicited from him. The history was as follows:—For the last sixteen years he had been a carpenter, serving with a brigade of artillery in India. Up to three years ago he had always enjoyed good health, but had been a constant and free drinker. He stated that he had never had syphilis. During the Afghan campaign he received a bullet wound on the right side of the sagittal suture, extending from the coronal suture in front to the lambdoidal suture posteriorly. The wound healed rapidly, but was complicated six weeks later by the formation of an abscess, which was opened antiseptically under chloroform, but he does not know whether any bone was removed. On being discharged from hospital he drank heavily, and in one of his bouts of intoxication he lay down in a marsh, where, becoming insensible, he was picked up and transferred to the hospital suffering from sunstroke. He remained under treatment for three months, and ever since had been troubled with pain and lightness in the head, numbness and weakness

in the right side. Whilst in India he had had dysentery, slight attacks of liver complaint and ague. He left India and returned to England in December, 1882, and was subsequently received into Netley, whence he was discharged in January last. From that time, up to a few weeks ago, he had been travelling up and down the country, spending the money he had saved, until about a month ago he was drinking in a public-house in Manchester and was there seized with some kind of fit, and thence taken in an insensible condition to the Manchester Royal Infirmary, and afterwards transferred to Workhouse Hospital.

On admission to the workhouse he was in a very low deponding state of mind, and from the very few remarks he made, it was gathered that he contemplated suicide. On March 10th the patient complained of very great and constant pain over the eyebrows, and suffered from anorexia. It was also found he was suffering from anæsthesia of the right side, which involved the face, neck, trunk, arm, and leg, but sensation was not quite lost in the sole of the foot. Taste was lost in the right half of the tongue, and there was partial deafne s and complete loss of smell on the same side. The right side of the tongue, right half of the fauces and the mucous membrane of the right cheek were likewise anæsthetic. The fields of vision of both eyes were much restricted, but especially so in the right, which was also achromatopsic, the patient asserting that everything appeared white. The left eye was not so much affected as the right, but although the man was able to distinguish that blue and yellow were dissimilar colours, he was unable to recognise the individual colours properly. There was no optic neuritis, and the pupils were equal, contracted, and responded to light. The right, or affected side, was paler than the left, and did not readily bleed when pricked. The patient himself ran a large needle nearly through the whole thickness of the forearm without blood flowing. The temperature in the right axilla was 96·2° F., in the left 97·8° F. The power of distinguishing between heat and cold was lost on the anæsthetic side. The tendon reactions were normal, and there was no ankle clonus and no paralysis. Up to March 15th the patient's condition had continued unchanged so far as the nervous symptoms were concerned. He was still very despondent, and had persistently refused to take solid food. His breath was very offensive; the tongue was covered with a brown fur; and the bowels were constipated. On March 18th the patient was seized with bilateral convulsions; but the nurse is convinced he was not completely unconscious at any time during the attack. After the fit had passed off it was found that hemiplegia had developed in the right, or anæsthetic side; but the face and tongue were not implicated in the paralysis. Motor power reappeared in the arm and leg at the end of two days, the patient remaining thereafter in much the same condition as he was before the fit. On the 21st, aphonia had become developed, and the voice was reduced to the faintest whisper, although articulation was still perfectly distinct. On March 23rd, the faradaic current was applied to the affected side and over the larynx, as aphonia was still present. The patient objected to this treatment, and after struggling in vain to prevent the application, he shouted lustily, having suddenly found the use of his voice; but on discontinuing the current the aphonia returned. The same evening, after being told that the electricity was to be applied in the morning, he attempted suicide by strangulation, but was prevented by the timely interference of the nurse. The current was applied on the 24th, but on the 25th the patient suddenly recovered his voice before the application was renewed. On the 27th tactile and thermic sensation returned in the whole of the right side, except the face and upper part of the neck, but analgesia persisted, and the special senses were still affected. He afterwards complained that the left extremities were heavy and numb, and on pricking the skin with a needle it appeared that the left side was less sensitive than the right. The temperature, too, was more nearly equal on the two sides, being 97·4° F. in the right, and 98° F. in the left axilla. From this last stage until April 21st his condition was very various. One day he would be more cheerful, and lose many of his special symptoms, but only to relapse again in a very short though varying period. About April 14th he appeared better, both mentally and bodily, and was permitted to get out of bed, and by way of occupation was allowed to assist the other patients in cleaning the wards. He had not been occupied in this way long before he took advantage of an opportunity to make elaborate preparations to commit suicide by hanging, but was again unsuccessful, by reason of the timely appearance of one of the attendants. The case was hereupon regarded as one requiring close and careful watching, and the patient was accordingly transferred to Prestwich Lunatic Asylum. When the patient was sent away, the hemianæsthesia and hemianalgesia had nearly disappeared, but the inability to distinguish between heat and cold remained. The two sides more nearly corresponded as regards temperature, colour, and the readiness with which they could be made to bleed on pricking. Hearing was more acute, taste and smell more nearly normal. The man could distinguish colours with both eyes, though there was still slight hesitation and evident difficulty when using the right. Objects when placed within a distance of two feet appeared to both eyes as blurred and indistinct. This difficulty, which has been experienced ever since the man came under observation, may probably be due to the contracted state of the pupils.

By the kindness of Dr. H. G. Murray it has since been ascertained that the patient on admission to the Prestwich Asylum was low-spirited and suspicious, fancying that he had been drugged, and that the day after admission he commenced to assist in the cleaning of the wards; that in a few days, the depression having passed off, he was employed in the joiner's shop, where he worked well and cheerfully until June 16th, when he absconded, and has not since been heard of.

Reviews and Notices of Books.

Practical Treatise on the Diseases of the Uterus. By A. COURTY. Translated by AGNES M'LAREN, M.D. London: J. & A. Churchill.

THIS is by the distinguished Professor of Clinical Surgery at Montpellier. It has been translated by his pupil and some time private assistant, Miss M'Laren. The translator was thus placed in very favourable circumstances for producing the views of her master in an English form, and she has done her work well. Courty's work has been well known for years to gynæcologists in France and elsewhere, and it has been held in high esteem, especially in France, as one of the ablest expositions of the views of the French school. Like the majority of works, both great and small, on the subject of which it treats, the book is defaced by the teachings of what are called the "more advanced" gynæcologists of the day, by which are usually meant those who accept what may be called the uterine reflex theory of pains and sufferings, grafted on the mechanical theory of uterine pathology in its most extreme form, and who carry out these views of uterine disease in practice to their logical ending—that is, perpetual local interference.

The work is divided into an introduction and two parts. The introduction treats of the anatomy, physiology, and teratology of the organs of generation, and of this part it is sufficient to state that it contains a fairly full account of the subjects. Part I. is called a General Survey of Uterine Disease, while Part II. treats of uterine disease in detail, so that the work presents a totally different arrangement of matter from that usually met with in works on diseases of women. Such an arrangement presents many advantages, for it gives an opportunity in the first part to discuss the principles which underlie and run through the second. The first part of the book contains its pith and marrow; the second part is the first carried out in detail. The general survey treats of the diagnosis, symptomatology, treatment, and general characteristics of uterine disease. The uterus has for a long time been regarded as a sort of bogy which cast its evil shadow over any or all parts of the body; there is apparently no condition of it from the blighting influence of which the other parts of the body do not suffer; its power for evil appears to be simply marvellous, to exceed that of any other and all other organs in the body put together. This mighty power for mischief possessed by the uterus Professor Courty accepts with implicit faith,

but on what evidence we have not discovered. On page 97 we read, "How often is one consulted for neuralgia or hysteria; for symptoms manifested in the stomach, the heart, or the liver; for digestive troubles—anorexia, nausea, diarrhœa; and for all the train of evils depending on poverty of blood—anæmia, chlorosis, emaciation, and exhaustion; but the natural and symptomatic manifestations of an unrecognised uterine malady!" We cannot help expressing a devout wish that in most of the conditions named the uterine malady may remain unrecognised, for then there may be some chance of relief and cure to the patient, for we find, "that very often an apparently insignificant disorder of this organ [the uterus] is felt throughout the body to a quite disproportionate extent." Tracing reflex symptoms to their source is a work of extreme difficulty, and although it is well established that pregnancy gives rise in many cases to a variety of distant phenomena, yet this is a very different thing from uterine reflex, and it may be safely affirmed that the evidence in favour of the statements we have just quoted is of the flimsiest character. A little further on we meet with the following: "It is of importance to proceed step by step, and to pass from general to local symptoms.....It is essential that the patient should be led steadily to the conviction at which the physician has arrived, for this conviction is the only means by which he can hope to make her understand the necessity for a local examination, and agree to submit to this painful trial.....Women are so much afraid of polypi, cancers, and ulcerations.....that the reasonable terror inspired by these affections will not only remove their repugnance to an examination, but will make them earnestly desire it." The wretched patient, who suffers from some insignificant and unimportant affection of the uterus, or perhaps no affection of it at all, is put through this horrible mental agony, and then is told she has an ulcerated or a displaced womb, and she becomes in a great many instances an invalid for life, for she gets displacement or ulceration on the brain, and it would be as easy to remove Helvellyn and plant it in Wicklow as to remove the impression produced on her mind.

The symptoms of these diseases are almost countless, and we find also that the medicaments and means of relief are extremely numerous. The late Dr. Churchill, having given not an exhaustive list of the many drugs which were said to have benefited amenorrhœa, concluded that the disorder must be very difficult to cure, and we believe that it would be much better for women to put up with many of the minor ills from which they suffer than to undergo the treatment recommended for them in the work before us. Take, for instance, amenorrhœa. According to Professor Courty, idiopathic amenorrhœa gives rise to very distressing symptoms, such as nervous disturbances, chloro-anæmia, headache, and drowsiness. It is true that these conditions are frequently met with in the same person, but there is no evidence to show that the general symptoms are caused by the amenorrhœa. There is evidence to the contrary, however. There are many women living in whom the uterus has been amputated during menstrual life, and amenorrhœa has been established, and these women have not suffered in consequence. M'Clintock pointed this out years ago, and yet, among others, means which have proved fatal in many cases are recommended for the treatment of amenorrhœa in the work before us. Again, if we take versions and flexions, we find among the many symptoms said to be caused by them, constipation, frequent micturition, and retention of urine; and these are said to be due to the pressure exercised by the displaced womb. We do not know what the weight of the uterus may be when suspended in the broad ligaments; but out of the body, as a dead weight, it is about an ounce and a half; it is evidently much less when suspended in the pelvis; at most, however, it cannot be heavier than a coil of small intestine two inches in length filled with fæces, and the weight of the latter has never been suggested as a cause of constipation or of retention; and it is difficult to imagine how a bent or an inclined uterus, so long as it is freely movable, can give rise to any such troubles. Courty adopts the mechanical theory of the uterine pathology in its fullest extent, as well as the now exploded doctrine of ulceration, and his treatment is adapted to these views.

We have said enough to give an idea of the book. There is, however, one other matter which we must mention. Dr. Matthews Duncan has written a preface to the English translation. Should anyone, however, buy the book with the idea that this preface contains a recommendation of it, he will be disappointed. The preface appears to have been written because "I have had the privilege of her [Miss M'Laren's] friendship since her childhood, and know her excellent qualities." We cannot help regretting that Dr. Duncan consented to do this, for many will naturally think that in doing so he countenanced or recommended a work which promulgates doctrines of which he has been throughout his life one of the foremost opponents.

Lectures on Orthopædic Surgery and Diseases of the Joints. Delivered at Bellevue Hospital Medical College during the Winter Session of 1874–75. By LEWIS A. SAYRE, M.D., Professor of Orthopædic Surgery in Bellevue Hospital Medical College, Consulting Surgeon to Bellevue Hospital, &c. Second edition, revised and greatly enlarged, with 324 illustrations. London: J. & A. Churchill. 1883.

DURING Dr. Sayre's visits to this country he availed himself of the opportunities afforded him on many occasions of stating, and, as far as possible, demonstrating his views and lines of practice; and the teaching of this volume will not be novel in its main doctrines. In the treatment of talipes Dr. Sayre lays stress upon the value of joint pressure as determining the necessity for, and also the seat of, division of tendons. Immediately after tenotomy he places the deformed part in the correct position, and thus is exactly opposed to the usually received view that it is better to wait for three or four days before trying to correct the deformity at all. In the treatment of joint disease he relies almost entirely upon fixation of the part, combined with extension. These principles are illustrated in their practical application in affections of all the joints of the body, and the author's mechanical ingenuity is abundantly evidenced. The book, however, is too large. It could have been shortened very considerably without sacrifice, and thus have been made much more generally serviceable. There is great repetition, which, although quite legitimate in clinical lectures, is very tedious when the lectures have to be read. Dr. Sayre is a firm believer in the evil effects of congenital phimosis and adherent prepuce, and is disposed to attribute all kinds of muscular spasms and paralyses to these conditions. He cites several cases in which circumcision was speedily followed by relief to these conditions. And Dr. Sayre goes on to state, "The same general disturbance takes place in the female from irritation of the clitoris; to illustrate which and the results secured from clitoridectomy" he quotes cases. The first is of a child nine years old, with spasm of the muscles of the thigh and calf, "Pressure on the clitoris caused spasmodic contraction of the muscles of the lower extremity. I clipped off the end of the clitoris." A month after she was stated to be well. Another case is that of a child, eight years old, who was sickly until three, and then began to improve, but had never been able to walk. Dr. Sayre found her healthy, "but unable to extend her limbs at all." He "found the clitoris very much congested, and the slightest touch produced spasm of the whole body."

Clitoridectomy was accordingly performed. The third case recorded is similar in all important points. We must protest very earnestly against this practice and teaching. Dr. Sayre appears to consider that circumcision and clitoridectomy are analogous operations. The loss of the prepuce for certain entails no evil, but to remove the clitoris is a mutilation only justifiable under the most extreme circumstances—circumstances which, from Dr. Sayre's account, did not exist in his cases.

San Remo, Critically and Medically Considered. By ARTHUR HILL HASSALL, M.D. With numerous Illustrations. 8vo, pp. 290. London: Longmans. 1883.

THIS book, which may be considered a new and expanded edition of Dr. Hassall's work, "San Remo and the Western Riviera," appears opportunely at a period when invalids are beginning to consider the important question of where they should winter. It contains full information respecting the climate, the natural history, and the medical characteristics of San Remo and the district in which it is situated. Its advantages as a winter resort appear to be a moderate and fairly equable temperature, a great amount of sunshine, with a clear bright sky and abundance of light, a small number of rainy days, and a refreshing and exhilarating air. Dr. Hassall has stated very clearly the classes of cases likely to derive benefit from residence there, and those which are not suited to it. "One paramount gain is that the invalid is able to take all but daily exercise, and this in bright sunshine even in midwinter." The advice he gives respecting the choice of a residence and the precautions to be observed by invalids are well deserving of the study of all who resort to the Riviera as a winter residence. The advice on the first of these subjects is the more necessary, as Dr. Hassall does not conceal the fact that, although of late years considerable improvement has taken place, the sanitary arrangements in San Remo are by no means all that could be desired. The chapters on the climatic conditions of San Remo and on the diseases in which they are likely to prove beneficial, furnish all the information requisite to enable the profession to form a good opinion as to the selection of it as a sanatorium for their patients, while those relating to the food supplies and to the natural history of the Riviera cannot fail to prove interesting to all who think of spending a winter on the sunny shores of the Mediterranean. The account of the vegetation of the Riviera, and of the birds, reptiles, and insects, has been evidently compiled with great care, and opens up an interesting field of observation to those who have no stated occupation, and who might find time hang heavy on their hands. The illustrations have been carefully drawn, and the whole get-up of the book is very satisfactory.

YORKSHIRE MEDICAL OFFICERS OF HEALTH AND CHOLERA OUTBREAKS.

A SPECIAL meeting of the members of the Yorkshire Association of Medical Officers of Health was held at the Queen's Hotel, Leeds, on Aug. 24th, for the purpose of considering the subject of "Asiatic cholera—the lessons from past outbreaks and the duties of sanitary authorities, of sanitary officers, and of the public in view of the possible introduction of the disease into this country." Mr. S. W. North (York), president of the association, occupied the chair. The discussion having been opened by the President, was carried on by Dr. Deville, Dr. Whiteside Hime, Dr. Britton, Dr. Giddings, Mr. Roberts, Dr. Wilson, and others, and finally the subjoined resolution was unanimously adopted:—"That in the opinion of this meeting cholera is transmissible by men and things coming from an infected locality. That cholera is likely to prevail with great intensity in low-lying localities, where the soil is wet and liable to contamination by organic matter. This liability is increased where the population is dense, and when general want of cleanliness prevails. That there is abundant evidence to show that cholera has been diffused by drinking water contaminated by infected sewage, and that very small portions of this infected sewage are sufficient to affect large populations using water contaminated with it. That in view of these facts it is desirable that sanitary authorities should take especial care to secure pure water—i.e., water free from all contamination by sewage; to secure the cleansing and purifying of all courts, passages, and crowded localities; the cleansing by flushing and ventilation of all sewers and other filth channels; the drainage and purification of the soil of all low-lying districts and its protection from impregnation with filth and other organic matter, especially excremental matter; the removal of all overcrowding, the cleansing and lime-washing of all lodging and tenant houses; and generally the purification of the air and soil in and about dwelling-houses."

"FOOD IN OBSTETRIC AND GYNÆCOLOGICAL PRACTICE."

To the Editor of THE LANCET.

SIR,—It appears from your editorial remarks in THE LANCET of Aug. 25th, that the impression given by reading my address delivered at Liverpool is not that which is intended. I do not believe that "chronic starvation" affects the tissues of the uterus and ovaries more than those of other organs of the body—necessarily so at all events,—and I thought I had expressly guarded myself from appearing to make that assertion. The reason for my limiting the generalisation made to the uterus and ovaries is not that I think it applies to these organs alone, or to these more than other organs of the body, but because, my observation having been made principally on diseases of these organs, the proofs of the generalisation have been necessarily derived from that source. If, for instance, I had asserted that chronic starvation is an almost constant preliminary of phthisis, which I thoroughly believe it to be, it would at once have been said, Where is the evidence of this? So far as the diseases of the generative organs are concerned, the proofs in my possession of the truth of the generalisation I have made are convincing. But it will be for workers in other departments of medical research to carry its application further and to collect observations bearing on the question. I am, Sir, yours obediently,

Berkeley-square, W., Aug. 27th, 1883. GRAILY HEWITT.

A MODIFICATION IN CATHETERS.

To the Editor of THE LANCET.

SIR,—Permit me to call your attention, and that of the profession, to a trivial modification which I have devised in the ordinary catheter. Though simple, I believe it will be found advantageous. In these days, when just importance is attached to perfect cleanliness in all instruments, and when foul catheters are accused of causing grave results, surgeons may be glad of some means of obviating one, at least, of the risks of catheterisation. My plan consists simply in making the catheter solid beyond the eye, and in sloping the solid part obliquely upwards, opposite the eye, in such a manner that no angles are left for the accumulation of dirt. The eye, in fact, presents the same appearance as the opening of a pipe stem into its bowl. I have had a set made for me in metal by Mr. A. Young, instrument maker, Edinburgh, and he tells me he is quite prepared to supply them in gum elastic. This I consider very desirable, for the sake of those elderly patients who are compelled to catheterise themselves constantly. Made in gum elastic there is another obvious advantage—that the instrument is strengthened at the eye, where it is now so apt to crack, and even break off, while in use. The additional cost is a mere trifle, and, if the demand became satisfactory, would soon be *nil*. I may mention that I have been encouraged to send you this account by the unanimous approval which my suggestion has met with at the hands of my friends.

I am, Sir, yours faithfully,

A. OGIER WARD, M.B. & C.M. Edin., &c.

St. Germains, Eastbourne, August, 1883.

THE LANCET.

LONDON: SATURDAY, SEPTEMBER 1, 1883.

THE Founder of this journal, with that strong faculty of perceiving the practical points of reform which characterised him, made use, fifty years ago, of the following words in its columns. On May 11th, 1833, Mr. WAKLEY said:—

"What is wanted is this: the institution of three great faculties of medicine—one in the capital of England, a second in that of Scotland, and a third in Dublin; all to be under precisely the same rules of government."

It detracts in no degree from the merit of Mr. WAKLEY that what he said was wanted in 1833 is still wanting in 1883. Had all the medical men who have had the honour of seats in Parliament possessed the same zeal for reforming abuses and antiquities in our medical system that he exhibited, this want would long since have been supplied, and the international misgivings about the equality of diplomas would have been removed by hearty and honourable guarantees. There have been some earnest medical reformers in Parliament—notably Dr. LUSH. But there have been medical members of Parliament who have had no heart for the work; and it would almost seem that when this great reform is carried—as carried it must be—it will be in spite of the lukewarmness of the medical members, or of their curious impression that the object of the reform to be effected is the pleasure of the corporations, and not the interest of the profession at large, and through it of the public.

We say this reform must be carried. Mr. WAKLEY was a practical man. He did not trouble himself with ideal grievances and reforms. Hence every reform but this, which his clear vision saw to be necessary, has been achieved. And this one must be achieved. Those who hinder and obstruct the way will only make for themselves dishonourable places in medical history; they will not stop the march of progress, or maintain bodies in perpetuity by a tax on the profession whose *raison d'être* is gone.

Reverting to Mr. WAKLEY'S share in the movement for a one-portal system, the above quotation is enough to show that it was that of an initiator. Long before any Association saw the evil of nineteen gates to the profession, his keen eye perceived it, and his practical mind suggested the remedy. If he had reason to complain in 1833 of the numerous gates to the profession, when each division of the kingdom practically admitted only its own practitioners, and when an Irish or a Scotch qualification was no title to practise the profession in England or take a medical appointment, what would he say now, when qualifications granted in any division of the kingdom are good for the whole of it, and all its dependencies, and when it is proved that men hopelessly inadmissible in one city flee to another with an assurance that they will find entrance?

The letter of Dr. BALTHAZAR FOSTER of Birmingham, in *The Times* of Monday last, is proof how well this subject is understood and how tenaciously the reform in question is demanded. Some of our Scotch friends write as if the demand for reform were the mere whim of a "few fashionable consultants in the West," and a few irresponsible "writers in the Strand." If it pleases any little coterie to write in this sense, it cannot hurt us or the cause of medical reform, which, originated, as we have seen, half a century ago by Mr. WAKLEY, has steadily progressed, and cannot be abandoned till it has secured equal curricula and examinations in each division of the kingdom, the abolition of all incomplete diplomas and of indecent competition of examining bodies, a proper recognition of the profession in the Medical Council, and the additional sanctity of medical titles.

THE word Massage has been used to designate a mode of treatment applicable to a class of cases which are by no means uncommon, and many of which have baffled the skill of the neurologist and the ingenuity of the gynæcologist. It is an unfortunate use of a term, inasmuch as it indicates only a part, for the word means rubbing or shampooing simply, and that, although a necessary, yet by no means the most essential, part of the treatment. The cases to which the method called massage is applicable have not been defined with sufficient accuracy; and partly owing to this fact and partly to the object of the treatment being misconceived, and to the obscure nature of the cases in which it is useful, the method has already been abused and misapplied. We have on a previous occasion called attention to some forms of abuse of it, and to prevent these as well as other forms, a knowledge of what is to be gained and what can be done by it is necessary, and this can only be acquired by the publication of all cases, unsuccessful as well as successful, in which the practice has been resorted to. The practice consists of several procedures, each of which has been long known to and employed by physicians, but not in the combined and carefully systematised manner recommended and practised by Dr. WEIR MITCHELL. These are isolation of the patient from friends and relatives, and placing her under the care of a skilled nurse; massage, shampooing, rubbing and electricity, or passive exercise; and feeding. The practice, when resorted to in suitable cases, is thoroughly scientific, and consists simply in removing the cause of the disordered condition and restoring the strength.

The disorders for which the method is suited are, in their inception, of a very feeble character, and would probably fall stillborn were it not for the assiduous care and attention bestowed upon them by friends and relatives. The supply of the latter is, however, so abundant, that the puny infants grow to be veritable giants—giants, however, which perish like the prophet's gourd, once their source of nourishment is cut off. The cases cured by the practice appear to be of the following character; their starting-point seems to be some mental shock or trouble, overtaxing of strength, or in some cases perhaps some trifling uterine disorder; sympathy, indulgence, moral mismanagement, encouragement to invalid habits from friends now come into play. The disorder will now retain its vigour without much variation, sustained by the vigilant care of friends. Soon, however, it becomes developed by the aid of the doctor—too often a neurologist or gynæcologist. In proportion to the

number and variety of doctors consulted will the disorder find new spheres of activity; it may assume a uterine, spinal, cerebral, laryngeal, or other character, according to the element ruling at the time; unfortunately it is too often uterine.

Dr. PLAYFAIR has published ten cases in which cures were brought about by the method we speak of. These cases had their origin in the ways we have stated. Indeed, Dr. PLAYFAIR clearly and unmistakably points out the part played by friends and by active local uterine treatment in these cases. Of the last he says: "I am not sure that I should not, in common honesty, make the humiliating confession that in many instances over-much and injudicious treatment, in my opinion at least, intensified and kept up the now dominating neurasthenic disorder, as in a case under my care as I write, in which the patient may fairly be said to be suffering from pessary on the brain, so incessantly is she thinking of one or other of the seventy-nine different instruments which she has had inserted during the last few years in America and in this country." We do not know which to admire most—the imagination which called into existence the conditions requiring the use of seventy-nine different pessaries, or the ingenuity which devised them.

How many women, fit subjects for the method of treatment included under the term "massage," go about labouring under some supposed affection of the uterus or spine, a burden to themselves and to their friends, cannot be estimated. The number, however, is by no means small. That there is no organic disease present in the uterus or elsewhere, and that these women are invalids made by their surroundings, is proved by the fact that their symptoms disappear after a few days of separation and isolation from their friends, and that the only indication then is to restore their strength, which is done by passive exercise, rest, and feeding. In one only of Dr. PLAYFAIR'S cases was recourse had to local uterine treatment. This was a case in which the uterus assumed a position of retroflexion, and, although this condition did not appear to have much to do with the symptoms, a stem pessary was introduced, fortunately without *preventing* a favourable issue. The treatment does not appear suitable for cases of organic disease, but rather for women who have acquired invalid habits, and for a large number of those who are always thinking of their displaced and ulcerated uteri, and of the ingenious instruments inserted and the varied applications made to cure them.

THE *Princeton Review* for July contains a paper by Professor WILLIAM B. SCOTT of Princeton College on Recent Researches in Cerebral Physiology. Mr. SCOTT is one of the clearest headed biologists of his country, and it is of much interest to notice the impression produced on his mind by the arguments in support of the most recent doctrines in cerebral physiology. The paper is not the less interesting for being intended for comparatively popular uses. The chief doctrine, of course, in which Mr. SCOTT seems interested is that of the localisation of function—a kind of modern phrenology, only with much more effort after a scientific basis than the old phrenologists cared for. After giving a *résumé* of the "centres" which have been indicated, and of the best established views as to the functions of the different parts of the cerebro-spinal system, Professor SCOTT comes to the "most important question of psycho-physiological inquiry—the functions of the cerebral hemispheres." After admitting with all physiologists that the cerebrum is the organ most indispensable for the operations of conscious intellect, he proceeds to discuss the question, "Can we find any reason to believe that the functions of the cerebrum are localised in its cortex? After reviewing the evidences for the theory of localisation, those from experiments on animals and those from pathological observations on man, with much clearness, he comes to the conclusion that the mental functions cannot be localised. He lauds highly the work of Wundt, as the most important of recent contributions to physiological psychology (Grundzüge der Physiologischen Psychologie, 2te aufl., Leipzig, 1880). He thinks the best statement of our present knowledge of the complex question of localisation will be found in the following propositions of WUNDT:—

"1. The Connexion of Elements: Every nerve-element is connected with others, and only then is it capable of physiological functions. 2. Indifference of Function: No element performs specific functions, but the form of its function depends upon its connexions and relations. 3. Representative Functions: Elements whose function is inhibited or destroyed may be represented by other elements, so far as the latter stand in the necessary connexions. 4. Localisation of Function: Every definite function has, under given conditions of conduction, a definite place in the central organ. 5. The Principle of Practice: Every element becomes the better adapted to a definite function the more frequently it is caused to perform it."

We see, says Mr. SCOTT, that the cerebrum is the most essential part of the brain for mental action, and that only through it can the impulses from the sense-organs rise into consciousness, or the will affect the body. Further than this, there is very strong evidence that it is indispensable to memory. To the great question which so holds us all, and which is dealt with reverently by Professor SCOTT, "Has anything in our investigation given us a clue to the origin and meaning of consciousness?" he answers, "It must be admitted that nothing has done so. Consciousness is an ultimate fact beyond which we cannot go, and all attempts to explain the transition from the unconscious to consciousness are merely clever tricks to evade the real question. The materialistic hypothesis regards the soul as a function of organised matter, the result of vibrating molecules, in the same sense that heat is a product of such vibrations. But this is entirely untenable. ..... Our immediate knowledge is that of consciousness; consciousness is the fact, matter the inference."

THE Board of Trade have received official intimation that in consequence of the existence of cholera in Borneo and Sumatra all arrivals from thence will be subjected to quarantine in Egyptian ports, and that the quarantine of seven days imposed on arrivals in the Red Sea ports from Suez will have to be undergone at Tor. Also that the Sanitary Council of Marseilles have decided to apply the existing quarantine relations respecting vessels from Egypt and the Red Sea to vessels from the whole of the Syrian coast, and only to admit arrivals from Smyrna and the coasts of Anatolia after a strict scrutiny and medical examination. The quarantine in Greek ports imposed on arrivals from Malta and Cyprus has been reduced to twenty-four hours.

Annotations.

"Ne quid nimis."

EASTBOURNE UNPROTECTED FROM SMALL-POX.

IF a statement which has appeared in the columns of a contemporary may be trusted, Eastbourne must offer special opportunities just now for the incubation and development of an epidemic of small-pox. On the 13th ult., as alleged, not less than sixty-eight persons were summoned before the local magistrates for not complying with the Vaccination Acts. This more than sufficiently sensational statement is amplified by another, even more startling, to the effect: "Several of them [that is, the persons summoned] had three children unvaccinated." As a result of these legal proceedings, it is asserted of those who were ordered to have their children vaccinated, "the delinquents, without exception, declared they would not obey the order." The opponents of compulsory vaccination are fond of asking what difference it can make to the vaccinated—if vaccination be an effective protection—if others who do not desire such protection refuse it. The vaccinated are safe—*ergo*, anyone can make himself or his children safe! To this sophistical reasoning it is only necessary to oppose one fact, which is the result of common observation. There is always—ever must be—a very considerable proportion of young and delicate infants under the age at which vaccination is deemed expedient who are not yet protected; and there is a class of young persons and adults who not having been revaccinated are no longer in a position to count on immunity. The existence of these two classes of the population would in itself be sufficient to render it imperative to insist that the law shall be enforced on the few for the good of the many; but there is another reason. Vaccination is a very effective protection, but no one has alleged that it is impossible that a vaccinated person should take small-pox. The malady will be modified if taken by a person who is under the protection of vaccination, but even modified small-pox is an affection which ought not to be permitted with no better excuse than that certain citizens elect to be lawless.

THE CORONER AND THE SOUTHALL FIRE.

DR. DIPLOCK'S idea of the duties of a coroner may be technically or constructionally correct, but they are neither historically nor traditionally accurate. The coroner was not simply to "sit upon" mortal remains, but upon "treasure trove," upon shipwrecks if any portion of a wreck were cast up on a seashore, and to intervene as "representative of the Crown" in any and every mystery in which the rights of the Crown either for itself or for the public were concerned. The chief functions of the coroner were to represent the Crown in its assertion of rights and claims, and in the protection of life. The objection that the mortal remains found in the ruins of Southall Asylum would not admit of identification is obviously untenable. We are quite prepared to admit that Dr. Diplock may have been within his rights—though we doubt it—in declining to hold an inquest in this deplorable case, but he would, most certainly, have been justified legally and morally in discharging the functions of his office, and therefore we cannot but regret that he fell back on a debatable "difficulty," if such it can be called, and refused. It is high time that the duties of the coroner and his court were revised and defined, to the extent of being reconstituted by the Legislature. As matters now stand it is manifest that the discharge of a great public duty may be declined, to the serious detriment of the public interest. As Parliament is no longer in session, it is impossible to do anything in this case; but we are strongly of opinion that it is one in respect to which the Secretary of State ought to be moved to interpose. As we pointed out last week, the notion of an inquiry to be prosecuted by the Commissioners in Lunacy is simply farcical. That Board is really inculpated—or, to put the issue more politely, needs to be exculpated—in regard to the occurrence. At present we can only guess at the truth; but it certainly appears that the building at Southall was not one which ought ever to have been licensed by the Commissioners, so imminent was the risk to which its construction exposed it, in the event of even a comparatively trivial "accident" by fire. It will be a public scandal if nothing is done to clear up the circumstances by which no less than six persons came by their deaths. If the occurrence is allowed to lapse in the public mind without an exhaustive inquiry grave injustice will be done, and the interests of public safety strangely neglected.

SANITARY PROGRESS IN ST. GILES'S.

SINCE the publication of the report on probable cholera centres, our attention has been called to the improvements accomplished in the notorious slums of St. Giles's. The entire sanitary district comprises about 5000 houses, and of these 194 have been dealt with under Torrens Act; 150 houses were completely demolished, and 44 greatly improved. Many of the houses destroyed formed part of Church-lane, a notorious abode of thieves and the lowest type of costermongers. This warren, where criminals were able to defy the police, is now replaced by splendid warehouses. Acts of Parliament were also obtained for dealing with two large areas: the one comprised several of the courts and alleys that were the terror of Drury-lane, and where model artisans' dwellings have now been erected; and the other is the Little Coram-street area. A public inquiry, leading to the condemnation of this latter district, was held in March, 1879, and Parliament confirmed this decision shortly afterwards. Yet last week, when we visited Little Coram-street, we found the houses still standing, though fortunately uninhabited. Thus there were no rates for the parish, and the poor were without their homes. This waste of time is therefore doubly disastrous. Nevertheless, the work, though slow, has already produced excellent results. Typhus, which whenever present always manifested itself in these condemned districts, has totally disappeared during the last year, and malignant scarlet fever is less common than formerly. The fact is that these improvements have, in the course of the last ten years, reduced the population of the district to the extent of 6697 persons, thus relieving a great deal of local congestion. There are now only 46,732 inhabitants in St. George's, Bloomsbury, and the south and north parishes of St. Giles's. But the overcrowding has not been checked without much suffering to the poor, who are driven away from their homes to make room for warehouses, or for dwellings that are let to a totally different and superior class of workpeople. As for the unwholesome portions of St. Giles's that still remain intact, some of them are to be swept away by the new large thoroughfare that will be soon carried through the district. It is also difficult to propose the destruction of further dwellings while nothing is done to replace those already condemned. We would insist therefore on the urgent necessity of at once rebuilding the Coram-street area. In the meanwhile, we are glad to note that an extra inspector has been appointed to see to the frequent clearing of dustbins, the disinfecting and flushing of street gullies and catch-pits, the whitewashing of courts and alleys, &c. A circular has also been sent to every house describing what precautions should be taken, and including among these the ventilation of house-drains by carrying the soil-pipe up to the roof. This latter advice is specially valuable when coming from

the sanitary authorities, as there are many people who look upon such a suggestion as a mere crotchet advocated only by fanatical sanitarians.

FORCIBLE DILATATION OF THE CARDIAC AND PYLORIC ORIFICES.

DR. A. ALBERTINI reports in the *Gazzetta degli Ospitali* of the 18th ult. that Prof. Pietro Loreto on July 15th performed forcible digital dilatation of the pylorus for the fourth time. The patient, E. P——, aged thirty-four, a native of Castroccero, had suffered for three years from an affection of the stomach with vomiting, often twice daily. She was so emaciated that the body resembled a skeleton. The stomach was bound by numerous and solid adhesions to the liver, the intestine, and the great omentum. Several arteries required ligature. The diagnosis, pyloric stenosis following slow inflammation, was fully confirmed, and the operation of digital dilatation (see THE LANCET of the 18th ult., p. 289) was completed under chloroform in thirty minutes. It was on the tenth day that the dressings were first changed. The wound was then healed without the slightest constitutional disturbance. Neither vomiting nor nausea returned, nutrition improved, and the patient left the hospital at the end of the month perfectly cured. On July 9th, Professor Loreto practised forcible dilatation of the cardiac orifice on E. G——, who for four years had had cardiac constriction. The patient had suffered from such continuous vomiting, incessant pain, and extreme emaciation, that her life was despaired of. In operating in this case the incision in the abdominal wall was almost horizontal, and just below the ensiform cartilage. The stomach was freely opened below the small curvature and a metallic dilator was employed to widen the contracted cardiac orifice. The stomach and the abdominal wall were sutured as in the pyloric operation. The wound healed by first intention, and without febrile disturbance; vomiting did not recur, food was relished, and the patient regained flesh so rapidly as to increase nearly fourteen pounds in weight within six weeks.

AN ATTACK ON AN EAST-END ROOKERY.

THE vestry of St. George's-in-the-East have adopted an energetic stratagem to rid themselves of some dilapidated property which is a disgrace and a danger to the metropolis. The ordinary legal methods require so much time to carry out, and are so uncertain in their result, that the vestry have resorted to the expedient of serving on the owner of the property a notice to make such extensive repairs that he will probably find it pay better to rebuild the entire court in question. In the meanwhile, the sanitary authority having declared the houses to be unfit for human habitation, the inmates must at once leave the premises. An effort was made to stay these proceedings, but Dr. Rygate, the medical officer of health, strengthening his position by a reference to our recent report on Probable Cholera Centres, was able to gain his point. Nor was this all. The clerk of the vestry has been commissioned to write to the Home Secretary, and explain why the Metropolitan Board is not prepared to carry out the improvement schemes for Perseverance-place, London-fields, &c., the districts which, in our report, we insisted should be at once pulled down. It was also proposed that the Metropolitan Board be urged to reconsider the medical officer's representations as to these localities. Thus the agitation we have sought to promote will bear some fruit. During this week all the occupiers of William's-court will have to leave their wretched dwellings. This Court consists of seven two-roomed houses, with no back yards, no back windows, and therefore no through ventilation. In front the houses are separated from a high wall by what may be described as a narrow passage rather than a court, for it is barely two yards wide. No air can reach this row of cottages, lying hid from the general thoroughfare and wedged in between the backs of the houses of two streets. We entered one house, and found that a rafter in the upper room had given way, so that it seemed dangerous to walk over the shaking floor. Nor was the ceiling any better, for a chimney had fallen through the roof and demolished the lath and plaster. The walls were damp, and the whole aspect of the houses was dark, dirty, cramped, and oppressive. Yet one woman assured us that she had lived there upwards of thirty years, and begged to be allowed to remain, insisting that she was utterly unable to find any other lodging. As it is for the public good that these poor people are removed, might not some of our numerous public charities take the matter in hand, and, while seeking to find better quarters for these outcasts, help them to earn their livelihood in a more satisfactory manner, so as to render them worthy tenants of improved artisans' dwellings?

UNCOVERED PLATFORMS AT RAILWAY STATIONS.

"A TRAVELLING SCOTSMAN" complains of rheumatism contracted by being turned out on the uncovered platform of Waverley station on the North British Railway. His experience is far from exceptional, and the North British Railway Company has not a monopoly of responsibility of this class. Although the Englishman's diligent indulgence in his constitutional privilege of grumbling has had the effect of compelling most of the companies this side the Tweed to provide shelter for their passengers at nearly all the stations on their lines, there are not wanting instances in which the protection afforded is little better than a delusion and a snare. Railway companies forget that if there were no covered platforms in the old coaching days, there were no draughty stations, and when passengers alighted they either stepped at once into some other vehicle, or took shelter in a more or less comfortable inn. It is simply trifling with the health of the weakly to turn them out of close railway carriages on to a bleak platform, with no sort of shelter, or nothing that answers the purpose, and leave them and their wraps to be soaked by the rain. Doubtless only a little agitation is requisite to ensure a change of policy in this respect, but that little must not be delayed. This is the season of the year when multitudes of persons, much jaded with work, exhausted, and generally out of condition, travel North and into outlying districts for health. It is cruel to carry paltry economy to the length which makes this travelling dangerous to life.

DIPHTHERIA AND SCARLATINA.

THE identity or not of the poisons producing diphtheria and scarlatina has been the subject of much discussion, and any information bearing upon the question is worthy of record. A curious instance of the manner in which these diseases at times coexist and alternate with each other is recorded in a report addressed by Mr. W. H. Power to the Local Government Board, and to which we refer elsewhere, on a prevalence of infectious diseases at Whitstable. Diphtheria commenced in Whitstable in October, 1880, and continued till January in the following year. It had not long prevailed when scarlatina appeared, the two diseases being concurrent and attacking at one time different members of the same family. The diphtheria then began to disappear, whilst the scarlatina became more prevalent and assumed an increasingly fatal type. Towards the middle of 1881 the scarlatina epidemic declined and diphtheria, at times fatal, reappeared; indeed with the absolute disappearance of scarlatina, diphtheria early in 1882 steadily spread, remain-

ing more or less prevalent throughout the year. During these several occurrences more than one of the medical practitioners in attendance on the cases had difficulty in diagnosing between the two diseases; thus cases of smart throat illness associated with distinct skin rash and altogether free from faucial false membrane occurred, and yet at no period of the illness or convalescence did any such tendency to desquamation, as usually follows on scarlatina, show itself. Eight or ten years ago very similar circumstances were observed at Whitstable, diphtheria being exceptionally fatal and at the same time associated with a fatal prevalence of scarlatina. Mr. Power abstains from expressing any comment on the questions arising from a consideration of these circumstances; the facts are, however, highly interesting.

OVARIOTOMY IN NEW ZEALAND.

OUR New Zealand correspondent informs us that ovariotomy was performed for the first time at the Christchurch Hospital, New Zealand, by Mr. F. McBeth Stewart, one of the surgeons of the hospital, on April 12th last. The patient was an unmarried woman, aged twenty-three. The cyst was a multilocular one, with very thin walls, which were ruptured in extracting it. The operation was performed under strict antiseptic conditions, including carbolic spray. Mr. McBeth Stewart was assisted by the other members of the hospital staff. The operation occupied but a short time comparatively. The stump was ligatured with strong carbolic gut. The after progress of the case was one of uninterrupted success. From first to last there was not a single bad symptom, and the only rise in temperature (to 101°) was caused apparently by a slight scald on the arm produced by the spray. There never was any pain in the wound at all, and it healed without suppuration. The patient was, at the date of our correspondent's letter (July 14th), perfectly well, and had returned to her occupation as a domestic servant. Great interest attached to this case, as three previous cases performed in Christchurch had proved unsuccessful. The greatest care was taken: a special room was provided, the temperature of which was carefully regulated. One of the staff sat up for the first three nights after the operation, taking the temperature and pulse of the patient every two hours for the operator's information. The only point in which the treatment deviated from that recommended by Sir Spencer Wells, was that substantial Scotch broth was given on the fourth day after the operation, as it was evident that the iced milk and water were not sufficient, and the patient was losing flesh and looking haggard. The effect of the broth was very marked and most satisfactory. Solid food was given early.

ANIMAL INTELLIGENCE.

ADOPTING the terse language of Shylock, we may ask, Hath a dog reason? And, falling into a more lengthy style, we may inquire, Is its reasoning at all comparable to that of the human being? We think both these questions must be answered in the affirmative. Those who differ from us will certainly admit that the possession by man of a language of symbols must have an enormous influence in increasing the power of his intellectual faculties. So much, indeed, must this be the case that what is really only a difference of degree is yet so stupendous that an intellect, the product of the employment for ages of word signs, might be thought to be an altogether new and original faculty. We are inclined to assert, however, that almost the sole essential difference between the intellect of the dog and that of the man may be traced to the above cause. A dog can reason, but not by using symbols. It employs the mental picture of an object, the olfactory perception of an agent, the auditory impression of a sounding body for the terms of its premises. But clumsy as these may seem, yet the mind of the animal successfully grapples with them. The dog argues from the ideas of concrete things, although incapable of abstraction and of the formation of a conception. Devoid of generalisations, it deals with particulars; but it does reason; it substitutes one idea for another; it weighs and estimates at their true value the successive mental images which present themselves to itself. Everyone knows the tenacious memory of the dog, not only for what it has seen, but for what it has smelt and heard. The olfactory sense in many species is truly marvellous, and its mental grasp or memory of the same is remarkable in an equal degree. No division can scientifically be drawn between the memory of a landscape by a dog and the recollection of a region by a man. Moreover, the dog is not simply a mechanism, the result of hereditary action. The individual can learn new things—nay, even execute complex mental feats, for itself. The following instance, which forcibly illustrates the power of the reasoning of the dog, came under our personal notice. A gentleman last season bought a middle-aged blue pointer, which with his good qualities as a "wide ranger" and "staunch pointer" combined the faculty of retrieving partridges. When the snipe season commenced in October, the dog took no notice whatever of the "long-bills," but looked upon them as vermin and drove them away. After being out about six times snipe-shooting, finding that his master shot these birds, the dog stood at each snipe, and, when killed, dropped it at the sportsman's feet. The instance is certainly remarkable. Such a faculty of ready apprehension and creditable performance of a difficult mental task (for it must be remembered that he had his hereditary influences to overcome) would have been hailed with delight had it been manifested by a child who had not the knowledge of spoken language.

DEATH FROM ATTEMPT TO REDUCE AN OLD DISLOCATION OF THE SHOULDER.

THE *New Zealand Herald* reports the occurrence of an accident in Castlemaine, Victoria, on March 12th last, to a Mr. Taylor, who fractured his arm and at the same time sustained a dislocation of the shoulder on the same side. The fracture was treated by splints and the injury was so far recovered from that the patient was able to attend to his business and complained only of stiffness at the shoulder. On May 13th, an attempt at reduction of the dislocation by pulley extension at the wrist and counter-extension in the axilla was made, the patient being under the influence of chloroform. After extension had been made for some time the tissues in the axilla gave way; the wound thus made was sewn up; hæmorrhage then occurred, which was controlled by pressure, but next day the limb was found to be gangrenous and was amputated; death occurred within twenty-four hours. A coroner's inquest was held on the case and a verdict of "Death from misadventure, no blame being attached to the doctors," was returned. The account from which we have quoted does not give us full information about the case, and without further facts it would be impossible to express any opinion as to the line of practice here adopted. As a rule, in cases of fracture complicated with dislocation, it is best to set the fracture very firmly in splints, and then at once attempt reduction of the dislocation under chloroform. In attempting to reduce old dislocations it is important to remember that chief reliance must never be placed upon extension. The first obstacle to be overcome in such cases is the adhesions which the displaced bone has formed to neighbouring structures; and these adhesions can only be safely, and also most easily, broken down by rotation and similar manipulations. When this difficulty has been got over that of the locking of the bones is met with; and while extension may

overcome this manipulation is usually easier, and it is always safer. The aim of extension is to overcome muscular spasm; and now that we can accomplish this by means of anæsthesia, and in some cases by well-conducted manipulation, its *rôle* in this department of surgery is very small. The case referred to above illustrates one of the dangers attending the operation of reducing old dislocations, and shows the necessity not only of always keeping these perils in view, but also of informing the patient and his friends with the fact that the operation is one of some gravity, attended with risk of serious complications.

HOSPITAL WORK AND PRIVATE PRACTICE.

WE have received from a respected correspondent the following statement, which we trust is capable of an interpretation different from that which *primâ facie* it would seem to bear. A lady said to be in reduced circumstances applied for medical treatment at a hospital where the diseases of women receive careful attention. The medical officer of the institution told the patient that she was suffering from malignant disease of the uterus. The day after the diagnosis had been made the lady received a letter from the medical officer, asking her to pay a visit at his private consulting-rooms; this she did, and was recommended to undergo an operation for which she was informed the fee would be five guineas. The operation was performed at the patient's residence, and the fee mentioned included a few visits afterwards. As the lady grew weaker she again attended, this time of her own accord, at the medical gentleman's house, and was seen for the "reduced fee" of seven shillings per visit; and for this she was apprised that she could obtain the prescribed medicine at the hospital by sending her servant for it. Later on, when the lady had become an in-patient of the hospital in question, another physician, who saw her twice, gave his card and address, without being asked for it. If these things be true, the conduct described cannot be too strongly reprehended. It is undoubtedly unprofessional for a medical officer of any charitable institution to solicit patients in the fashion above indicated. And that a hospital should supply the private paying patients of its staff with medicine is decidedly a gross abuse of the funds of the charity.

THE PNEUMOGASTRIC NERVE.

THE study of the physiology and pathology of the vagus is as many-sided and difficult as it is interesting. The latest contribution to the subject is a pamphlet, entitled "Vagusneurosen," by Dr. Edinger (Urban und Schwarzenberg, Vienna and Leipsig). This article is noteworthy for its brevity, the wealth of its references, and for the fairly exhaustive account of the whole department which it gives. Perhaps the paralysis which occurs after diphtheria is particularly deserving of study from the present point of view. The pulse, which may be slow, irregular, or even excessively frequent; vomiting; difficulty of swallowing; loss of voice; general laryngeal, and, possibly, bronchial paralysis, which may be met with in this affection, are almost certainly bound up in some way with the vagus. We may mention, by the way, what seems still to be insufficiently known—viz., that death from "diphtheritic paralysis" is by no means of unfrequent occurrence. In the pamphlet before us an observation by P. Meyer is recorded, showing that a parenchymatous neuritis was detected in the vagus, phrenic, and the nerves of the extremities of a fatal case. Many degenerated fibres were also discovered in the pharyngeal and carotid plexuses and the superior and recurrent laryngeal nerves. Vulpian, Déjérine, Abercrombie, and Kidd have found lesions of the large motor cells of the anterior cornua and their homologues. Dr. Edinger writes a good description of the symptomatology of the par vagum, and justly observes that in many cases not all the fibres of the nerve are equally implicated. So far as we know, Habershon and Letulle are the only other physicians who have attempted complete accounts of the subject. The thesis of Letulle bears the date of the present year; but we have not yet received a copy. Notwithstanding the attention which the subject has received, there are yet many disputed points and debated issues to settle.

SOUTH WALES UNIVERSITY COLLEGE.

AN announcement has been made that the Council of the new College at Cardiff is going to open its classes in October next, and that for this purpose the old infirmary buildings have been rented as a temporary home for the institution. A subcommittee has already been instructed to take preliminary steps for altering and furnishing the building for the reception of pupils. In connexion with this matter a painful controversy has arisen. The Cardiff Corporation has pledged itself to find a site for the new College, and it has also offered temporary accommodation in the Science and Art School. The latter, however, proved to be insufficient, and the scheme was disapproved by the Science and Art Department. The Corporation then offered some chambers to the College Council, which that body felt compelled not to accept, as they were on many grounds entirely unsuited for their purpose. The College authorities have meanwhile been forced to provide for themselves by hiring the old infirmary, a building which they consider suitable for the permanent home of the College. The Town Council, on the other hand, has decided more than once against this site. Our interest in the matter arises from the fact that the infirmary is objected to partly on sanitary grounds. Some time ago there was an outbreak of erysipelas there, and it has been represented that, that being so, it must be an unhealthy building for a college. But there is a wide distinction between a hospital crowded, perhaps overcrowded, with sick people, and the same building used for college classes. We hope that the College Council will take pains to ascertain that the drainage of the building is quite satisfactory, that the drains are ventilated, and that there is no direct communication between the sewers and any of the cisterns or rooms. With this precaution rigidly observed, and a thorough cleaning of the building, we do not see any objection, on medical grounds, why the infirmary should not be converted into a college. Quite other reasons must determine whether it is the best position for the permanent buildings.

ISOLATION AMONGST HOP-PICKERS.

IN a report which Mr. Butterfield presents to the Sanitary Authority of the West-Kent Combined District in connexion with the recent official memorandum on precautions against cholera, he draws particular attention to the need of making special provision for isolating any cases of infectious diseases which may arise amongst the hop-pickers who will soon be migrating into that district in large numbers. The want of some such accommodation has been noticed before, and having regard to the fact that every available dwelling-house is, during the hop-picking season, fully occupied, and that even barns and out-houses have to be fitted up as temporary dwellings, the arrangements which are needed will have to be specially provided. The accommodation should also be capable of being moved to the villages where it is needed, and, having regard to this fact, it appears to us that tent hospitals would best answer the purpose. Tent pavilions have of late years been much improved; they are fitted with double walls which are impervious to rainfall and incombustible, and if cold weather should supervene, their heating by means of hot water pipes can be managed in a most satis-

factory manner quite into the season when frost begins. Each of the sanitary authorities concerned, and which has no means of isolation actually available, would do well to secure a hospital marquee of the sort we have indicated; and even should it not be wanted this autumn, its possession would enable the authority at a future time to secure isolation of infected persons without the delay which, under other circumstances, would favour the spread of disease.

AZOTURIA AND CANCER OF STOMACH.

NORMAL azoturia is a not inconvenient expression to indicate the natural amount of urea excreted in the urine. The daily discharge of this substance in health for each individual is a quantity which practically remains the same from day to day. Disease may disturb this average. The diminution in the amount of urea excreted in association with the presence of many hepatic disorders is of much interest. Now M. Rommelaere has come to the conclusion that in cancer of the stomach there is progressive hypo-azoturia, not explicable by supposing that the quantity of albuminoids ingested is too small. This falling off in the quantity of excreted urea does not occur when the stomach is affected with chronic ulcer, according to the physician just named. (Vide *Journal de Médecine de Bruxelles* for July, 1883.) Hence an estimation of the daily discharge of urea may prove of service in the differential diagnosis of the diseases referred to. An explanation of the hypo-azoturia associated with malignant disease may easily be found. It may be said that the cancer, like a true parasite, steals the proteids for its own growth. But there are difficulties in the way of accepting so simple an hypothesis.

REPORTS ON CHOLERA IN EGYPT.

DR. SCHAFFEY BEY, who was despatched by the Egyptian Government to report on the origin of the cholera outbreak at Damietta, and whose opinion deserves thoughtful consideration, has made a report which fully bears out the views we have several times expressed. He finds no history of importation from India, but he describes the existence in and about Damietta of precisely the same conditions which obtain in connexion with the genesis of cholera in the Indian delta of the Ganges. Apart from local filth, he regards these conditions, however, as exceptional in the case of the Nile delta, and he describes how the special fouling of the water with the carcases of animals which had died of bovine typhus, and how the orgies that prevailed during an eight days' fair which immediately preceded the outbreak, tended to favour the epidemic. A later report by the Sanitary Commission of Alexandria puts the total cholera deaths during the past two months as close on 26,000.

THE BURIAL LAWS AMENDMENT ACT.

AN unforeseen difficulty, unknown to many sanitary authorities perhaps, has recently cropped up on the East Sussex coast in relation to the interment of a dead body, where immediate burial had been requested by a medical practitioner. At a small village a coastguardsman's child died after a few hours' illness. The death was certified as being due to "choleraic diarrhœa," and the inspector of nuisances was requested by the medical attendant of the corpse to see to the removal and its burial as soon as possible. The friends of the deceased made no objection to such action. So far as we can learn, twenty-four hours' notice was given to the vicar of the parish; but when the funeral with the Catholic priest (the officiating minister) arrived at the churchyard gates, the vicar was present with the keys, and, though the grave was dug, for some little time refused admission, because he had not, in accordance with the Burial Laws Amendment Act, received forty-eight hours' notice of the intended interment, and "which notice, by the advice of his bishop, he was directed to observe." At length the difficulty was overcome by the priest consenting to bury without his vestments. Sanitary officers would do well to note the above circumstances, and so avoid much trouble and annoyance. In doubtful cases it would be as well to be provided with a magistrate's order, which would, we believe, override the above Act.

THE INTEREST OF ENGLAND IN THE EXAMINATIONS OF THE SCOTTISH CORPORATIONS.

WE have long pointed out that the way in which the Scotch Corporations do their work is more an English question than a Scotch one. One of our Scottish correspondents lately showed how small was the proportion of Scottish students taking the licence of the College of Physicians in Edinburgh. Of the list of eleven to which he referred, only one had residence in Scotland. Eight were from London, one from Bristol, one from Canada, and one from Glasgow. The latest list of examinees of the Edinburgh Colleges is still more suggestive of the idea that their licences are not much appreciated in Scotland. According to this list, which will be found in a recent number of a contemporary, there were 88 candidates in the examinations for the double qualification of the Edinburgh Colleges. Of the 88, 51 were English students, 19 Irish, 9 were foreign, and 9 Scotch. Of a total of 88 one in ten only was Scotch. The severest thing that can be said against the English critics of the work of the Scottish Corporations is that they seem to regard it with the same kind of suspicion and mistrust with which Scottish students regard it. We certainly cannot advise any English student who respects his own work and wishes to have it respected by others to be satisfied with the test of the Scottish Corporations. But so long as some English and Irish students do seem to find a refuge in these examinations, so long shall we maintain the right of England and Ireland to a strong voice in determining their efficiency.

THE PROPHYLACTIC ACTION OF COPPER.

SOME evidence tending to disprove the theory of the prophylactic action of copper maintained by M. Burq was contributed at the meeting of the Académie de Médecine, held on Aug. 21st, by M. Bailly of Chambly, in the department of Oise. An experience of sixteen years' duration in connexion with a factory, where workmen are largely employed in copper, has shown that the *employés* are not in any degree exempt from typhoid fever, choleraic diarrhœa, and other infectious diseases. M. Bailly's paper has been referred for criticism to the same commission which is already engaged in reporting on M. Burq's last communication.

SUBSOIL WATER AND TYPHOID FEVER.

SOME researches have lately been made by M. Tessier of Lyons with a view to test the strength of Pettenkofer's position. As our readers know, Pettenkofer believes that there is a close relationship between the fall in the level of the subsoil water and the rise in the curve indicating the rate of mortality from enteric fever and cholera. M. Tessier does not confirm the hypothesis of Pettenkofer. It was shown that the level of the ground water fell and rose with the waters of the Rhône. The other factor was obtained from the statistics of the hospital at Lyons. From a comparison of the curves indicating the amount of ground water and the death-rate from enteric fever it came out that the latter was directly proportional to the former. On the other hand,

the investigation of 300 to 400 cases of typhoid fever has allowed Tessier to establish the fact that the sufferers had drunk of the water of the (surface) wells, and that those inhabitants who used water directly from the Rhone had been spared the disease.

THE CHAIR OF MEDICAL JURISPRUDENCE AT ABERDEEN.

DR. MATTHEW HAY, at present assistant to the Professor of Materia Medica in Edinburgh University, was on Tuesday last appointed to the chair of Medical Jurisprudence at Aberdeen, vacant by the retirement of the veteran Dr. Ogston. The University Court sat for two hours dicussing the matter, and it is believed that the claims of local men were found difficult to overlook, but were so evenly balanced, at least in the case of the physicians to the Royal Infirmary, that the appointment of Dr. Hay seemed the best solution of the difficulty. There is a feeling of regret that Drs. Beveridge and Fraser have been passed over, but the University may be congratulated that one who has given such evidence of a fitness for original research as Dr. Hay should have been appointed. If will be remembered that there were eight candidates for the vacancy.

LOCAL ACTION IN RESPECT TO GROCERS' LICENCES.

THE good people of Burnley are of a mind to redress their own grievance in the matter of grocers' licences for the sale of intoxicating drinks. Deeply impressed with the social injury these licences are the means of inflicting on the community, the inhabitants of Burnley addressed a petition to the Justices in Licensing Session assembled; this was signed by 15,000 persons, which is said to be more than a fourth of the total population. Another petition was signed by women alone—women are the chief victims—to the number of 1200. As a result of these requisitions, the justices very properly investigated the applications for grocers' licences in detail, and at one sitting refused twenty-five, against twenty-seven they consented to renew. The like action has been taken at Accrington, and four-fifths of the householders have expressed themselves unfavourable to the renewal of such licences. The evil wrought by these licences ought to be arrested; and if the Legislature—at the instance of large holders of house property—refuse or neglect to interfere, the local populations must take the remedy into their own hands by petitioning justices, who can, if they will, refuse licences.

THE THIRD ELEMENT OF THE BLOOD

HAYEM has repeated his convictions on the subject of the newest phases of the histology of the blood before the Académie des Sciences. As it will tend to make clear some of the confusion which has grown around the question, we give in a few words Hayem's conclusions. We do this the more especially because our readers may compare them with the papers by Norris, lately published in our columns. The hæmatoblast of Hayem is regarded as the precursor of the red blood disc and as the agent concerned in the coagulation of the blood. The "blood plate" or "plaquette," described by Bizzozero, is considered by the French observer to be identical with the hæmatoblast. It will be remembered that Norris has postulated the identity of his invisible corpuscle with Bizzozero's "plaquette." By Hayem the invisible corpuscle is still looked upon as a red disc from which the hæmoglobin has passed away. Each observer claims for his element an important *rôle* in the development and coagulation of the blood. Schmidt of Dorpat has assigned the chief agency in the process of coagulation of the blood to the leucocytes, or white blood-corpuscles.

THE DUBLIN HOSPITALS.

FROM the Twenty-fifth Report of the Board of Superintendence of the Dublin Hospitals we learn that nine institutions in that city receive Parliamentary grants, of which three are general hospitals. On April 1st, 1882, 726 patients remained in these institutions, and 9414 were admitted during the year, making the total under treatment 10,140, of whom 9085 left the wards cured or relieved. The mortality was 4·6 per cent. on the cases estimated on the numbers who were discharged, died, or whose cases have been treated to a termination. The total daily average number of beds occupied throughout the year was 719·47. The Board strongly recommend the necessity of reconstructing the Richmond Hospital, and they consider that the only way in which the total unsuitability of the hospital for its purpose can be remedied in a complete and effectual manner is by pulling down the present structure, and reconstructing it on a proper hospital plan. Great difficulty appears to be experienced by the Board in obtaining the necessary statistics and details for their Report in proper time for publication, the delay arising, they state, from the fact of not getting the returns sooner. In several cases three letters had to be addressed to the hospital authorities before the returns were furnished.

HOSPITAL SATURDAY AND LONDON WORKMEN.

GREAT efforts are being put forth to make the Hospital Saturday collection larger and more worthy of the cause and of the contributors than it has yet been. It is felt by the promoters that the collection has never reached, or come near reaching, an amount such as the working classes should contribute to institutions of which they have almost the exclusive use and advantage. Nearly two hundred more ladies are to be stationed to promote the street collection, which last year, with one thousand ladies and unfavourable weather, amounted to £2300. The great development of the Fund, however, is to be looked for in workshops. It is not fair to the ladies to let the brunt of the collection fall on them. It should fall on workmen themselves, who should hold meetings to organise and encourage systematic and conscientious contributions to the Fund. A little self-denial on Saturday nights would add thousands to the Fund.

HABITUAL DRUNKARDS.

THE inspector of retreats reports so far favourably of the working of the Act; but as he has only two retreats to report on the result is not much. In one case three out of five admitted during the year have received decided benefit, and in the other, nine out of twenty cases are spoken of as certain or probable cures. He hopes well of the new establishment, The Cedars at Rickmansworth, for the reception of sixteen male patients of limited means, to be called the Dalrymple Home. But little will be done under the existing law.

FAÏENCE AS A VEHICLE OF CONTAGIUM.

THE search for almost impossible places wherein contagium may lodge is not one of the least striking features of this careful age. Porous ware may become literally infiltrated with noxious matter and may possibly be the receptacle and breeding ground of the germs of diseases. Evidently, if we may trust the teachings of M. Constantin, even glazed earthenware is not free from objection, for it always contains rugosities and chinks, however minute, into which undesirable substances may enter from the fluid contained in these vases en faïence. M. Constantin would proscribe such glazed ware from hospitals where contagious diseases are treated. Glass and porcelain, he says, ought only to be

found there. And we might add—carrying the point to the bitter end—that no cracked cup, mug, or feeder, or other food-holding utensil ought to be allowed to exist where the liability to contagium presents itself.

FRENCH ARMY HOSPITALS.

THE reorganisation of the French military hospital system, decided on in 1877, is about to be carried out. Eleven district military hospitals will be established at Amiens, Tours, Limoges, Rouen, Le Mans, Orleans, Chalons, Besançon, Nantes, Clermont-Ferrand, and Montpelier, respectively. The cost is estimated at thirteen millions of francs. In towns where there is no army hospital proper, wards in the general hospitals will be set apart for the use of soldiers. The probable cost of this further alteration is four millions and a half.

IMPORTATION OF RAGS.

THE importation of Egyptian rags so far as the Port of London is concerned is for the present at an end. No cargo has been received for some time, nor is any expected. The Port Sanitary Authority have, however, made preparations for the disinfection or destruction of any that may arrive, and a Customs minute has been issued enjoining surveyors of Customs to report at once to the Port Sanitary Authority any cargo containing, or suspected of containing, such rags.

DR. JACOB S. MOSHER, a distinguished physician of Albany, N.Y., died suddenly on the 13th ult. He graduated at the Albany Medical College in 1863, and early in the following year entered the corps of volunteer surgeons for New York troops, and was attached to the Army of the Potomac as it lay before Petersburg. He was subsequently made Assistant State Medical Director of the State of New York, and went on duty at Washington. From 1869 to 1873 he was Surgeon-General on the staff of Governor Hoffman, and was afterwards Deputy Health Officer of the port of New York. Since vacating that appointment he had practised in Albany with considerable success, gaining the respect and esteem of all with whom he was brought into contact.

THE Association of German Naturalists and Physicians hold their fifty-sixth session at Freiburg on September 17th and following days. There are twenty-two sections; and the special subjects for debate in Medicine are "Progressive Muscular Atrophy" and "The Salicyl Treatment of Acute Articular Rheumatism." In the section of Diseases of Children special reports dealing with tuberculosis and with syphilis are to be presented by a large number of members, including Drs. Demme of Berne, Weigert of Leipzig, Baginsky of Berlin, Wyss of Zurich, Heubner of Leipzig, Karsowitz of Vienna, and Henoch of Berlin, a separate branch of these subjects being assigned to each reporter.

L'ASSISTANCE PUBLIQUE has proposed to found one or more agricultural orphan asylums or colonies in Algeria, where children who have been morally abandoned may be advantageously placed and looked after. A special commission is to start on September 1st, and a vote of 10,000 francs has been granted to defray the preliminary expenses.

A PARLIAMENTARY paper has appeared containing the circular recently issued by the Local Government Board to Town Councils and other local authorities, calling attention to the provisions of the Artisans and Labourers' Dwellings Improvement Acts, and urging the destruction, where necessary, of insanitary dwellings.

DOCTORS do not limit the exercise of their beneficent function of saving life to the lines laid down in medical practice. By courage and presence of mind, Mr. R. D. Cameron, house-surgeon to the Stroud Hospital, was enabled last week, with the assistance of Mr. Lansdowne, who is, we understand, about to enter the medical profession, to save from drowning a child who had fallen from the beach rocks at Torquay. Mr. Cameron's own life was nearly sacrificed in his heroic and fortunately successful efforts to save that of another.

WE have received the first three numbers of the new weekly journal of the American Medical Association. It consists of thirty-two pages of scientific matter, and is evidently being conducted with energy and skill. In the first number we find the minutes of the recent annual meeting held at Cleveland, Ohio, and the addresses then delivered and papers read are being published in the succeeding numbers. The journal promises to be of much greater value than the annual volume of the "Proceedings," which it supersedes.

MR. ALFRED DOUGLAS ADRIAN, Barrister-at-Law, has been appointed Assistant-Secretary to the Local Government Board in the place of Mr. Sutton, who has resigned owing to ill-health. Mr. Adrian has, through his labours in connexion with the preparation of the model bye-laws, become largely identified with the sanitary work carried on by the central authority, and the energy which he has displayed in the duties he has heretofore performed augurs well for the work he will have to perform in his new capacity.

M. PASTEUR, who was largely instrumental in procuring the despatch of a French medical expedition to Egypt to examine into the causes of cholera and the nature of the disease, has received reports from the commission which are highly satisfactory to him. The mission believes that the result of examinations it is now pursuing will establish that old accepted theories as to the origin and nature of the disease are greatly at fault.

THE *Union Médicale* narrates a case of obstruction of the lower third of the small intestines, which proved fatal in a child aged two hours. The cause of the obstruction was found to be due to a mass composed of twenty dead lumbricoid worms and some débris of *gras-double* (fragments of gastric mucous membrane of the ox), of which the child and its parents had partaken abundantly.

MR. C. SPENCE BATE, F.R.S., delivered the presidential address at the meeting of the British Dental Association at Plymouth on Saturday last. Dr. John Hunter, of Edinburgh, was elected President for the ensuing year, and that city was fixed upon for the next meeting of the Association.

THE latest telegrams from Cairo state that six doctors and thirty-six hospital assistants have arrived from India, and that, although the cholera has now virtually disappeared from Lower Egypt, their services will probably be retained.

THE death is announced, at the age of eighty-two, of Dr. John Allen, of New York, who, it will be remembered, was the first to reach the side of President Lincoln, after receiving the fatal wound from the pistol of Wilkes Booth.

"FEVER" is stated to be prevailing seriously in a close quarter of Camden-town. The locality is one to which the attention of the sanitary authority has been frequently called.

THE house-to-house sanitary inspection instituted at Hackney by Dr. Tripe has so far included visits to over 30,000 dwellings, and has, it appears, brought to light the fact that the better-class houses are far from being complete in sanitary arrangements.

ON Wednesday last Sir Charles Dilke inspected the Twickenham sewage works, of which complaint has recently been made. Sir Charles was accompanied by Major Tulloch, R.E., one of the engineering inspectors of the Local Government Board.

IT is reported that Dr. Jackimovicz, of Jarvszinka, in the government of Kiew, Russia, has just died at the age of 106, and that he was able until nearly the close of his life to superintend the working of an extensive practice.

IT is gratifying to note that at Baden the use of live pigeons is forbidden at the shooting matches.

REPORT
OF
The Lancet Special Sanitary Commission
ON THE
DUSTYARDS OF LONDON.

SINCE the alarm consequent on the outbreak of cholera in Egypt, so much has been said concerning that old-standing grievance, the domestic dustbin, that the present seems a favourable moment to supplement this outcry by some description of the numerous dustyards which are also a menace to public health. But few persons realise what a vast problem is involved by that one subject, the removal of dust. When once the dust is poured into the dustman's cart, the interest of the general public ceases, and we are apt to forget that though the dust is out of the houses, it still remains in our midst, a source of danger and of nuisance. As a matter of fact, this rubbish is of considerable commercial value, and it becomes the subject of keen competition between rival contractors. The problem thereupon loses much of its sanitary aspect, and is converted into a business question, involving the necessity of drawing a fine line between profits and loss, and therefore of reducing every expense. But this is not the spirit in which we should deal with offensive substances. The first object should be their immediate and safe removal; any hope of profit must be put aside as at best but a secondary consideration. Such is not, however, the case, nor can we expect this to be so while the old system of contracting for the removal of dust still prevails. A contractor must of necessity work for profits, particularly if he is beaten down by competition, and what he loses in the price he accepts from the vestry he must make up out of the dust. His object will not be, therefore, the prompt removal of the dust, but the careful sifting, which will yield the best ash and save all that is of the slightest value.

The dustbins of London yield four distinct products. The first is known as "ash." These are the particles that pass through the finest sieve and are composed mainly of ash, dust, and earth—that is, the earth brought into houses from the street and subsequently swept off the floor. This ash that goes away from London as dust is mixed with clay and brought back to us in the form of the bricks with which our houses are built. The second produce is known as "breeze," and consists of all the small cinders extracted from the dust. This is also used in brickmaking, but only as fuel to dry the bricks. Then we have the "hard core;" that is to say, all the hard substances, such as gallipots, broken crockery of all descriptions, some of the smaller tins, &c.; and this is used for the making of roads. Finally there remains the "soft core," or moist substances, such as vegetable and animal refuse. This "soft core" is the most obnoxious and at the same time the least valuable of the four articles that are offered for sale in all the dustyards of London. Other objects are collected and sold, but the quantities are comparatively unimportant, and occupy only a small place in the calculations made by the contractors. We allude to such articles as old boots, broken glass, paper, old iron, and empty preserve tins, &c. These would be considered as "hard core," but are often sorted out and sold separately. Such, in a few words, is the nature of the trade done in dust; and, having explained the technical terms, we will now attempt to describe the dustyards themselves.

We first proceeded to Battersea to visit the dustyards, which are so near to the Southwark and Vauxhall filtering beds that particles of the dust could be carried over into the water by a strong wind. The first yard is immediately under and on the east side of the Battersea railway bridge, opposite Grosvenor-road Station. It is surrounded by a high wooden paling; but, as the piles of dust reach to the height of six feet and more, and the women clamber up them to do their sifting work, some of the dust can easily be borne over this partition towards the waterworks that are on the same side of the railway line, and so close at hand. On the day of our visit, there were only about a dozen women at work, and but a small accumulation of "soft core." The amount, however, must at times be much greater, for the manager, whom we met on the premises, informed us that he only loaded one or two barges a week, and as the "ash" and "breeze" cannot be mixed with the "soft core," the latter therefore is probably allowed to remain nearly a week in this dangerous proximity to the water-supply before it is embarked. The other dustyard is further off the filtering beds, and lies between the entrance to Battersea-park and the goods station. Here the accumulation of refuse is so ancient that it forms a formidable hill, and has been allowed to stand for so long a time that a portion is covered with grass. The excuse given for this state of affairs was based on the unfavourable condition of the brick market. Last year, some twenty to thirty trucks of "ash" and "breeze" were sent away every day from this yard, and now it is difficult to sell more than eight trucks per day. The dust, however, comes in just in the same ratio as last year. Nor is this all. During harvest time there is no demand for manure, and hence the "soft core" also accumulates, and this precisely at the most dangerous season of the year. It will be seen, therefore, that there is a conflict between the interests of the public and of the contractor, and that at Battersea, in any case, the desire to "bull" the market takes precedence over considerations of public health. Fortunately there are no dwellings near these two dustyards, but the dust blows freely into the goods station, where it is mingled with every sort of merchandise, and is probably conveyed to every part of the kingdom.

From Battersea we went to Lambeth, where there are two yards facing each other in a narrow street close by the Chartered Gas Works. The most important is known as Cookson's yard, and it takes the dust from St. Giles's and from Westminster. The space was somewhat restricted for the large amount of matter to be dealt with, but we were glad to note that carbolic acid powder had been sprinkled over the "soft core." Amid piles of filth, the men were sitting eating their dinners with unwashed hands. They all protested, however, that they enjoyed the most robust health; and the foreman propounded an ingenious theory by which he maintained that the mixture of so many poisons produced a wholesome reaction, and evolved gases that were stimulating and beneficial to health. The establishment opposite, known as Boyce's, is not so large, and on the morning of our visit emitted even stronger odours than its neighbour. It is here that the dust from Clapham is sorted, and we noted a proportionately greater accumulation of "soft core," which was being mixed with stable manure and carted away. As no disinfectants were used for this operation, the result was most unpleasant, and must have proved a nuisance to the neighbouring habitations. In both these yards attempts were made to burn some portions of the refuse, but the smoke was objectionable, and this practice could not be continued.

Paddington is, we should imagine, the most important centre for dealing with dust in London. Side by side in

North Wharf-street, close to the Harrow-road, there are three gigantic establishments. The central yard belongs to the Paddington Vestry, and is, in its way, a model institution. Here the dust is sorted by machinery, a process which has the advantage of rapidity and of saving human labour. The machine has a somewhat cumbersome appearance, but it seems to answer its purpose very well. The carts are emptied over an iron grating. Men with pitchforks and rakes drag the refuse over this grating, the dust and cinders falling through, while the greater part of the "soft core" and "hard core" remains to be dealt with separately. By steam power, buckets, similar to those used for dredging purposes, fetch up the "ash" and cinder and tilt it over slanting sieves that shake off the larger particles, while the finer dust again falls to the bottom. Here it is once more taken up by another series of buckets, which empty it into slanting wooden channels, so that it can slide down to a barge or to a heap where the "ash" is stocked. From the "breeze" that comes off the sieve, women pick off the bones and any other foreign matter as fast as it is delivered to them by the machine. By this means a cartload of dust can be sifted and divided into four separate heaps, and the bones and other special items extracted, in a few minutes. This great rapidity of operating very materially reduces the nuisance. In another part of the yard there is a tank made of stout planks, with straw wedged in between them; into this is poured the mud swept off the streets, and known technically as "street slops." The water filters or drains through the straw and is allowed to escape into the sewer, while the drier portion of the mud remaining in the tank or receiver is mixed with the "soft core," and then sent off in barges to be used for agricultural purposes. At best, however, this is but a poor mixture, not easily sold; and very often it is necessary even to pay to have it taken away. The yard, we should remark, was kept with great order and cleanliness, and disinfectants liberally used. The district of Paddington is also to be commended for employing Glover's patent tip-van, which has an iron domed lid, that closes tightly over its contents, and thus prevents the dust from blowing about in the streets whilst being conveyed to the yard. Close at hand, in Meade's yard, the dust is also sifted by a machine similar to the one already described; but the yard is much smaller and not so clean. On the other side of the Paddington yard we have the very large establishment belonging to Mr. Hobbs, who is one of the most important contractors of London; and we may judge of the extent of his business by the fact that he is at present employing 180 vans and between 200 and 300 hands. The yard is immense; it is quite a mountain-land of refuse, with a low range of "soft core" in the foreground, and higher ranges of "ash" and "breeze" towering above. Batches of women, in clusters of ten and twenty, are perched here and there, sifting and sorting this rubbish, their faces begrimed with dust, their arms bare, their clothes in rags. Now and then a woman more careful than her neighbours will twist a cloth round her head to keep the dust out of her hair. Many very old and very wretched women resort to this menial work, but there are also young and hearty girls who are glad to work ten hours a day at dust-sifting in the hope of making ten to eleven shillings a week. Nor did any of them complain of ill-health, though the yard itself was scarcely the place to obtain information on this score; and the class of people reduced to this miserable avocation must have already been inured to every form of unwholesome living. This makes the danger none the less for those who live in the immediate neighbourhood. In this respect the three great dustyards of Paddington are most unfortunately situated. In front of them are a number of small houses densely crowded. These, it is true, are to be removed shortly to make room for the Paddington Market; but this will scarcely be an improvement if the food of the district is to be exposed for sale within a few yards of the spot where all the dust and refuse of Paddington, St. Pancras, Marylebone, and possibly other quarters is deposited and then shaken up and thrown about, not merely by hand, but also by the powerful action of two steam engines. Behind the three dustyards there runs the canal, where the water is exceptionally foul. On the other side of the canal, but scarcely sixty yards' distance from the barges that receive the refuse, are the open windows of St. Mary's Hospital.

From Paddington we went to the City-road, and at the point where this great thoroughfare crosses the canal will be found the dustyards belonging to the vestries of St. Luke's and St. Mary's, Islington. In the latter we saw that the "soft core" was mixed with manure and piled up against the wall of a neighbouring paper factory, and this just where the engine-room is situated. Considerable heat, therefore, came through the wall, and acting upon the manure augmented considerably the bad odour which spread so far that it could be noticed at the ginger-beer factory opposite, or in the street, and at some distance from the yard. With this exception no special fault can be found. The yard is very clean and well kept; and in this respect compares favourably with that of St. Luke's, on the other side of the City-road. Here the accumulation of "soft core" was greater, there was no shed to cover the sifters, so that the dust may more easily blow into the windows of the model lodging-houses and mission hall that face the yard, or into the flour mill next door.

On the Surrey side, between Blackfriars and Waterloo-bridges, there are three gigantic dustyards belonging to the Clerkenwell Vestry, the City Sewers Commissioners, and to a private contractor named Reddin. These yards are close to one another in the Commercial-road, and have proved a considerable nuisance to the neighbouring industries that line the banks of the Thames. On this score there has been, to our knowledge, at least one lawsuit, but the verdict in the first court being unfavourable, and the expenses heavy, the case was not carried forward. Credit, however, must be given both to the Clerkenwell Vestry and to the City Commissioners for doing all that is possible to reduce the nuisance to a minimum. Floors and pavement are kept scrupulously clean, everything is swept up regularly, and the "soft core" and the manure shot at once into barges. As the quantities received are so large there is no difficulty in promptly filling and despatching the barges. The City Commissioners treat on this spot some 650 loads of refuse from dust-bins per week, without counting the sweepings from the streets, &c. For these purposes they employ eighty-two horses and some 500 hands. The stabling is an ideal illustration of cleanliness and good ventilation; while last year the wages of all the dust-sifters were raised 5 per cent. to encourage them to do their work in as clean a manner as possible. Yet it must be acknowledged that the entire system is wrong; that dust should not be manipulated in a populous centre. The City Commissioners are, therefore, going to the expense of building a huge furnace, into which the carts are to be emptied, and everything burnt. Serious doubts, however, are entertained as to the success of this experiment; it is a question whether the matter will burn so easily as is supposed, and, in any case, without counting the "ash" and the "breeze," it will entail a loss of £2000 to £3000 net profit now realised on the sale of odds and ends picked out of the dust. Thus the old paper alone which is saved from the contents of the dustbins brings in to the City Commissioners from £600 to £700 a year.

In Reddin's yard the dust from Blackfriars and from St. Martin's, Strand, is sorted in the rough manner practised by some private contractors. There are huge mounds of unpleasant stuff more than twenty feet high. The stables are dark, dirty, and small, the flooring of the yard is irregular and ill-paved, no attempt is made to rival the spruce cleanliness of the neighbouring establishments. Unpleasant little pools of water, that look like liquid manure, are met with on all sides, and there is an aspect of untidiness and dirt that harmonises with the preconceived notions of such a business. In some of the model establishments it is, on the contrary, difficult to realise that the work done is of so repulsive a nature. The extensive yard belonging to the district of St. Mary's, Newington, is a good case in point. This is the largest yard we have visited, and at the same time it contained the largest accumulation of manure, but everything was in good order. Nevertheless there have been, we are assured, many complaints; and the yard, as usual, is surrounded by dwellings.

From a sanitary point of view, the authorities of the neighbouring parish of Camberwell are far more successful in their method of treating the dust. The carts simply unload direct into the barges that are always kept waiting at Glengall Wharf, on the Surrey Canal. There is no sorting done whatsoever. The vestry undertake to fill the barges, and the bargemen start as soon as the barge is full. The bargemen are neither paid nor do they pay for taking the dust. Their profits come from the brickmakers, to whom they generally deliver the dust and who have to sort it for themselves. The result is that Glengall Wharf presents a perfectly clean aspect, and all the obnoxious concomitants of the dustyards are relegated to the distant brickfields.

With respect to the "street slops," which are generally mixed with the "soft core," the parish of Camberwell have constructed two receiving tanks of concrete, capable of holding 2000 cubic yards. The water is filtered off and runs into the sewers, and thus 2171 loads received from January 17th to March 24th last were reduced to 606 loads of more solid mud. Now, however, it has been decided to empty the liquid slop direct into barges and reserve the tanks for exceptionally wet weather, or in case there is a break-down in the barge service. The dust from Lambeth, at a pier close to Westminster-bridge, and the dust from Chelsea, at Lot's-road Wharf, near Cremorne, is, in a similar manner, shot direct into barges. The same may be said with respect to St. George's the Martyr, Borough, as the authorities of this district, we are told, consign their dust to Mr. Burton, contractor at Nine Elms, who, having no yard, is obliged to shoot it direct into his barges, and convey it away from London.

In the South-east of London the districts of Bermondsey and of St. Olave have both adopted the same method, with, however, very different results. Both vestries have a yard of their own, the first near Cherry-garden Pier, and the other at Shad Thames; but the dust is sorted in these yards by a contractor. At the latter place the vestry see that the work is done with the utmost possible order and cleanliness, and insist on preventing large accumulations; but at Cherry-garden Pier, though there is a representative of the Bermondsey Vestry present, we found one of the dirtiest and most disorderly dustyards of London. There was a very large accumulation of "soft core" that emitted foul odours. "Ash" and "breeze" rose up in mountains; and overlooking the yard wall, only separated by a very narrow street, was a row of densely populated houses. The river was in front, and on both sides the yard was wedged in by corn warehouses. No shed or covering protected the dust from the wind, or sheltered the poor women sifters when at work. The dust could, therefore, be blown freely either over the surface of the Thames or into the neighbouring buildings.

In the East-end we visited Abbot's yard, in Dodd-street, which we found inconveniently near to a Board School, to a depôt of Australian meat, and a large number of private dwellings. The accumulation of obnoxious matter was considerable, and the bad odours were greatly augmented by the dredging on the canal, an operation which, when carried out in the neighbourhood of the dust-yard, seems to have been especially unpleasant. From here it is not far to Rawlinson's yard, in Copenhagen-place, and the situation of this yard is even less favourable, as it is in the middle of a street of houses let out in small tenements. The accumulation of dust was so great that the canal could not be reached without climbing over mounds. The yard was very small, and evidently no good sales had been effected for a long time. But the most obnoxious dustyard of the East-end is in Shadwell, at the end of a little thoroughfare, appropriately termed Labour in Vain-alley, for every effort has been made, but as yet ineffectually, to remove the nuisance. We do not believe that we have anywhere encountered worse odours than in this yard, and it is surrounded by numerous very poor dwellings.

Altogether we have visited nineteen dustyards of London, and find them one and all dangerously near to inhabited houses or to the water-supply of Southwark. Some were in densely crowded districts; some were surprisingly clean, others very obnoxious and untidy. In some cases laudable efforts were made to remove the dust as soon as it was sorted; in other instances it was allowed to accumulate for months. But, do what one will, it is impossible to make a dirty business clean, and dust cannot be thrown about and sifted without some particles being taken up and cast far and wide by the wind. As these particles are likely, in many instances, to carry with them the specific germs of disease, this industry must be considered unwholesome, and should only be allowed in isolated places. From all that we have seen, we conclude in favour of conveying the carts direct to the barges, so as to avoid all sorting and sifting in town. Nor must the barge be allowed to remain long at the pier. It would not cost much to occasionally despatch barges that are not quite full. The only alternative is that of cremation. At Leeds the experiment has been tried, and is stated to be very successful; but in London we must wait till the City Commissioners have completed their furnace before we pronounce an opinion, as the materials to be dealt with are not altogether similar. In the meanwhile, and in view of the possible outbreak of cholera next autumn, we would urge the abolition of the numerous London dustyards. The greater part of the dust contracts expire next March, and fresh contracts will be made six weeks previously. This will be an excellent opprtunity for reforming, or altogether changing, the system now in vogue.

THE EXHIBITION OF HYGIENE AT BERLIN.

I.

THE General German Exhibition of Hygiene (Allgemeine Deutsche Ausstellung auf dem Gebiete der Hygiene und der Rettungswesens), which is being held at Berlin, and which will remain open until the end of October, is well worthy a visit. Never before has so large and important a collection of all that is essential in public and personal hygiene been made. The International Exhibition at Brussels in 1876, and the smaller but very practical sanitary exhibition at South Kensington during the Congress of 1881, cannot be compared with this one, where Germany, and especially its capital, have poured forth their contributions in a manner that evinces how vast and valuable are the advances which in late years that country has made in the all-important work of the public health. Nor must it be forgotten that the present exhibition was not the first attempted in Germany. The Hygienic Exhibition was projected to have taken place last year, the grounds were laid out, the building stocked with exhibits, and all was in readiness for the opening ceremony, when, on May 12th, 1882, the building took fire, and in a few minutes the fruit of much labour was utterly destroyed. With praiseworthy zeal and energy the promoters of the exhibition, which has H.I.H. the Empress for its patroness, lost no time in repairing this disaster. New plans were made, and a new building of glass and iron rose out of the ashes of the former wooden structure, whilst all the elaborate plans, maps, models, &c., were reproduced, and in less than twelve months the present Exhibition was completed.

The ground upon which the Exhibition stands is situated in the N.W. quarter of the city, lying between the Moabit-strasse and Invaliden-strasse. It is laid out tastefully in the form of a park, with walks and fountains, and is traversed by the viaduct of the recently completed metropolitan railway, the arches of which have been utilised for numerous exhibits. It is very accessible from all parts of the city; and from the large number of people who continue to visit it daily, it may be pronounced a complete success. The introduction into the grounds of a very extensive café restaurant, and of orchestras, where concerts are daily given, has doubtless done something to attract visitors, who are thus enabled to combine much pleasure with an amount of instruction that is in itself of great value. To adequately describe all the objects of interest in this Exhibition would require many pages and numerous illustrations. We believe it has been contemplated to publish such a volume, and if this idea be carried out it will assuredly be a remarkable work; for so inclusive is the scope of the Exhibition that it touches not only upon all the matters connected with the saving of life, or its maintenance, but also upon manufactures and trades more or less intimately connected with the main object. An enumeration of the thirty-four sections under which exhibits are to be found will serve to show how wide is its scope. They are as follows:—I. (1) Matters connected with instruction and art of hygiene, methods employed in the care of health and preservation of life; (2) nutriment and diet, means of life and foods; (3) the care of the mother and infant, provision in families for the physical and mental training of children; (4) technical education; (5) schools; (6) exercise. II. (7) Clothing and the care of the skin, establishments for bathing and washing; (8) care of the poor, workhouses; (9) criminal establishments and reformatories; (10) dwellings; (11) public buildings; (12) hospitals and infirmaries. III. (13) General hygiene; (14) diseases of the people; (15) first aid to the sick, in accidents, to the wounded; (16) care of the sick; (17) military and marine sanitation; (18) disposal of the dead; (19) veterinary subjects. IV. (20) Earth, soil, and atmosphere; (21) water-supply; (22) removal of refuse, sewage, and drainage; (23) lighting; (24) heating and ventilation. V. (25) trades and industries; (26) mountain and cottage life; (27) management of forests and lands; (28) transit by land; (29) transit by water. VI. (30) Protection from fire;

(31) from lightning; (32) from explosions; (33) from floods; (34) methods of insurance.

All these departments are represented, some with considerable profusion, by exhibits from various municipalities, private firms, scientific bodies, and the Governmental departments. Naturally, a large share falls to Berlin itself, and as the exhibits of this municipality may be considered to be representative of those of the nation generally, we will speak in the first place of them.

Under Public Health, Berlin contributes many interesting subjects. There are seven large charts of the city, showing by means of various colours, depths of shading, &c., the relative distribution of the population, as regards number of occupants of single houses, the relative wealth of the inhabitants, and mortality. Special charts deal with the mortality from infectious diseases. A large map indicates the position and size of the various hospitals, the State hospitals being coloured blue, those of the municipality red, private institutions green, each being marked with the number of beds. Maps, plans, and models of the large town hospital at Friedrichshain give many details of this splendid institution, which is built on the pavilion system, there being six two-storeyed pavilions, each with 64 beds for medical cases, and four one-storeyed pavilions for surgical cases (128 cases), besides two isolation buidings, 600 beds in all. The maps and plans show clearly the method of heating and ventilation, and the model represents one of the surgical pavilions. The municipal hospital at Moabit is also elaborately illustrated, especially as to its method of heating and ventilation, and apparatus for disinfection, whereby articles are exposed to damp heat as well as to dry. There is a similar, and even more extensive, exhibit of models and plans of the Asylum for the Insane and Idiots at Dalldorf, erected a few years ago, and other illustrations of certain workhouses, schools, gymnasia, &c. The central cattle market and slaughter-house, which has also been recently erected, is represented by a very complete model and numerous photographs and plans. In connexion with this department, Dr. Hertwig exhibits the method employed for the examination of diseased meat, especially trichinised flesh. The arrangements are such that the suspected meat can be subjected to a very thorough examination with great readiness. Several microscopes with specimens of trichinæ in all stages are shown, and also specimens of cysticerci, hydatids, and tubercular disease (Perlsucht). In another department are several plans of Berlin, to illustrate such matters as the situation and extent of public gardens and open spaces, the various kinds of paving in the several streets, the arrangement of the town drainage, water-supply, [&c.

Berlin, August, 1883.

WILLS OF MEDICAL MEN.

THE will of John Hare Gibson, M.D., late of Hull, who died on May 30th last, has been proved at the York district registry by Mr. George Holmes Bell and Mr. Charles Bains Bell, the executors, the value of the personal estate exceeding £4600. The principal legatees under the will are the testator's daughter, Mrs. Emily Sahlgreen, and his grandsons John Gibson Wilkinson, George Wilkinson, and Waldemar Wilkinson.

The will and codicil of Francis Black, M.D., late of 32, Kensington-gardens-square, who died on May 29th last have been proved by Mrs. Janet Black, the widow, and Mr. Henry Johnston, the executors, the value of the personal estate amounting to over £26,000. The testator bequeaths legacies to children, a grandson, and others; and the residue of his property he leaves upon trust for his wife for life and then as she shall appoint.

The will of Joseph Henry Shorthouse, M.D., of London-road, Croydon, who died on June 13th last, was proved on the 9th ult. by Mr. William Linley and Mr. George Tyrrell, the executors, the value of the personal estate exceeding £700. The testator leaves to his wife his furniture and effects and £100 absolutely, and the income of one-third of the remainder of his property for life; the residue of his real and personal estate he gives to his four daughters, Ada Laura, Stella, Nellie, and Emily.

The will of Alexander Barclay Sharpe, M.D., late of Knights Hill, Lower Norwood, who died on June 19th last, was proved on the 7th ult. by Mrs. Julia Marian Sharpe the widow, Mr. John Thornhill Morland and Mr. Francis North, the executors, the value of the personal estate amounting to over £9800. The testator leaves £300 to his wife, £1000 to his daughter Effie, and the residue of his real and personal estate upon trust for his wife for life and then for his daughters.

The following legacies have recently been left to hospitals and other medical charities:—Mr. William Goding, of 13, St. George's-place, Knightsbridge, £200 each to the Hospital for Consumption and Diseases of the Chest, Brompton, St. George's Hospital, the Lock Hospital, and the Cancer Hospital, Brompton.—Mr. George Case, of 76, Jermyn-street, £100 to the Gloucester General Infirmary.—Mr. Thomas Agnew, of Fairhope, Pendleton, Lancashire, and of Manchester, print publisher, £4000 to the Children's Hospital, Pendlebury.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS TO THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

ON SEASIDE RESORTS.

1. *Diphtheria at Whitstable, by* Mr. POWER.—Diphtheria having been absent from the Blean rural district in which Whitstable is situated for nearly two years, four fatal attacks of it, as also three from so-called croup, occurred in the town of Whitstable towards the end of 1880. In 1881 eight more diphtheria deaths and two more croup deaths took place in the same town, and eight more fatal diphtheria attacks were recorded in 1882. Besides which, according to Dr. Robinson, the health officer, above forty non-fatal diphtheria and so-called croup attacks have come under notice in this little town during the period referred to, this number, in his opinion, by no means representing the total amount of throat illness that has occurred in the place. Dr. Robinson had already failed to elicit anything very definite as to the circumstances under which the disease had arisen and spread; and owing both to the absence of any sufficient record of the attacks, and to the fact that a large number of cases had evidently occurred which were of so mild a character that no medical attendance was sought, Mr. Power's inquiry also became abortive from the etiological point of view. The sanitary state of Whitstable is, however, interesting, especially at this season, when visitors to some extent frequent this place, which lies midway between river and sea. To a great extent Whitstable is much neglected; its streets and roads are mostly uncared for, some of the houses are greatly crowded together, a good water-supply exists, but only a small proportion of the houses take it, the remainder drawing from wells deriving their contents from a surface soil which has for untold years undergone all sorts of pollution. The drainage is bad in several respects, some of it passing into dykes, where it has at times caused much nuisance, the rest being carried into culverts which, notwithstanding the fact that their contents are held back at high water by sluice valves, are without any means of ventilation. The waterclosets, too, are rarely provided with any proper means of flushing. Altogether we are not astonished to find that in the ten years 1873-82 there have been, out of a population of some 6000, as many as 185 deaths from the more ordinary "zymotic diseases."

2. *Typhoid Fever at Weston-super-Mare, by* Dr. BLAXALL.—In our issue of July 14th last we published a letter from the medical practitioners of Weston-super-Mare, alleging that no epidemic was prevalent in the town, and that there had been but little sickness there for some months past. The letter was published in consequence of certain reports to the contrary, and it would now appear that these rumours were based on facts which we find recorded in Dr. Blaxall's report. The report deals essentially with an outbreak of enteric fever in two families within a fortnight of their leaving a lodging-house at Weston, being apparently associated with the use of polluted water. The story, as detailed by Dr. Blaxall, is an interesting one; but at this season of the year it is not so much an isolated occurrence of this sort, serious and fatal as its results were,

that calls for comment; it is rather the description of the sanitary condition of the town and of its lodging-houses. There is a good and a plentiful water-supply, delivered by gravitation on the constant service system, and yet Dr. Blaxall found that upwards of 400 houses depended upon wells, and he points out that since the town is traversed by drains and sewers more or less of an imperfect character, and since the soil is polluted by soakage from surface nuisances, such wells must be regarded as affording a dangerous water-supply. The fact of the well-water being subject to failing is now at least well known, for out of 240 samples submitted to analysis, the medical officer of health found "upwards of 100" affording evidence of contamination, several being "so highly polluted as to be unfit for dietetic purposes." Then, as to sewerage:—The sewage, it appears, is necessarily pent-up several hours daily by the tide, the pressure being relieved by two penstocks and air shafts. But, says Dr. Blaxall, "At the time of my visit the sewers were unventilated, and there are no means of flushing." Next, as to lodging-houses:—Dr. Blaxall, having inspected several of each class, expresses the opinion that there is a general prevalence in them of conditions that exercise an injurious effect upon health. There are facilities for the direct escape of sewer air into them; pipes may be found leading direct from pumps indoors into the pans of out-door watercloseta, as a sort of makeshift for flushing purposes; in-door closets are a nuisance from want of proper ventilation; and bell traps and broken apparatus are intended to keep out foul air. The result was that people complained of stinks, and they suffered from nausea, headache, and sore-throat. As many as 120 of the lodging-houses use well water instead of the wholesome town service. Some of these conditions have, we believe, somewhat recently been remedied. Thus some air-shafts to the sewers have been opened, and a number of wells have been closed. It is also evident that there is an earnest desire on the part of the authority to secure the healthiness of the lodging-houses; they have offered to inspect them, and to certify to their wholesomeness, but the report says "no one has taken advantage of this offer." This is much to be regretted, because no step could more thoroughly have restored public confidence in the healthiness of a seaside resort which is deservedly popular. Dr. Blaxall recommends the registration of all the lodging-houses under Section 90 of the Public Health Act, and having regard to the failure to secure their voluntary registration, we hope the proposal will be carried into effect.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Tottenham.—The Sanitary Association of Tottenham continue to do good work. They now issue their ninth report on the health of the district, which contains some 50,000 inhabitants, and had in 1882 a death-rate of 18 per 1000 living. This death-rate is higher than any since 1871, when Tottenham was suffering from the effects of several years of inefficient sanitary administration; it is also higher than that obtaining in the twelve suburbs, and which only reached 16·5 per 1000. The additional death-rate is to an important degree made up of fatal attacks of measles, scarlet fever, and diphtheria. From scarlet fever there were no less than 73, and from diphtheria 27, deaths. And not only so, but this excessive zymotic mortality does not extend to neighbouring parishes; it is purely local, and as such the association rightly state that, from an etiological point of view, it calls for special investigation on the part of the medical officers of health, both of Tottenham and of the districts that have escaped. The system of sewerage is regarded by the association as mainly in fault. In 1873-74 a striking and rapid decrease took place in the zymotic death-rate in connexion with the free ventilation of the sewers that was carried out; but this important sanitary precaution appears now to be, to an important extent, disregarded. The association also urge the provision of a hospital for infectious diseases. We have shown some time back that the wants of this district, and of adjoining ones, were urgent in this respect, and we hope something will soon be done in the matter. A public mortuary is also needed.

Hove (Urban).—The mortality statistics of this suburb of Brighton, for the three months ending June, which have but recently been issued, afford evidence of satisfactory sanitary condition. The 76 deaths, although showing a further increase upon those returned in recent corresponding quarters, were equal to an annual rate not exceeding 14 per 1000, while the annual birth-rate for the quarter was only 24 per 1000. These figures sufficiently prove the thoroughly abnormal character of the population, and the futility of comparing their statistics with those of ordinary urban sanitary districts. Only 2 of the 76 deaths were referred to zymotic disease (these were fatal cases of diphtheria), and the proportion of infant mortality was exceptionally small. The medical officer notices that the mean death-rate in Hove during the past eight years has not exceeded 13·3 per 1000. So low a death rate is partly accounted for by the large proportion of domestic servants in the population, and partly by the apparent absence of any correction for deaths of Hove residents occurring in the union workhouse, or in the public institutions of Brighton.

Huddersfield (Urban).—The quarterly return issued by Dr. Cameron for this urban sanitary district for the three months ending June last is interesting from several points of view. The annual death-rate for the quarter was equal to 23·6 per 1000, which was 2·1 above the mean rate in the twenty-eight large towns dealt with in the Registrar-General's weekly return; it was also 2·8 above the rate in Huddersfield in the corresponding period of last year. This increase of mortality occurred almost entirely among adults, and was due to the greater fatality of diseases of the respiratory organs. The number of deaths referred to these diseases, and to phthisis, which had not exceeded 134 in the second quarter of last year, rose to 198 in the corresponding period of this year, and even exceeded the number returned in the first or winter quarter. This exceptional fatality of lung diseases in the quarter ending June last, which was not confined to Huddersfield, is attributed by Dr. Cameron to the unusually wide range between the day and night temperature, probably due to the small amount of moisture in the air, and implying a rapid radiation of heat. Among the twenty-eight large towns dealt with by the Registrar-General, Huddersfield showed during the last quarter the lowest death-rate from the principal zymotic diseases, which did not exceed 0·57 per 1000. Dr. Cameron gives some interesting facts bearing upon the notification of disease—(Huddersfield was one of the first towns to adopt compulsory notification)—and upon hospital isolation. It appears that only one death from scarlet fever was registered within the borough last quarter, that eighteen cases of this disease were reported under the Local Act, and that twelve of these were removed to Birkby Hospital. The enteric fever wards were empty throughout the quarter, and at no time did the hospital contain more than ten patients; the admissions during the quarter were twelve, the discharges eighteen, and no death occurred. It is not unreasonable to attribute the recent comparative immunity from zymotic disease enjoyed by Huddersfield in great measure to the combined effect of notification and of Birkby Hospital. We should much like to see added to Dr. Cameron's excellent quarterly return a small table giving a summary of the principal statistical facts for recent quarters, which would be valuable for comparative purposes.

Belfast.—During the four weeks ending June 23rd the total births registered amounted to 514, and the deaths to 392, giving a natural increase in the population of 122 individuals. The average death-rate was equal to 24 per 1000. Phthisis caused 74 deaths, and other diseases of the respiratory organs 102, or a total of 176 deaths from affections of the lungs, a number equal to a death-rate of 11. There was only one death from small-pox recorded during the month.

Cork.—During the four weeks ending the 11th ult., 158 births were registered, and 102 deaths. The death-rate was equal to a mortality of 16·0, and omitting those who died in the workhouse, which is outside the district, it was 14·0. Zymotic diseases have not prevailed to any considerable extent, the mortality from this class of diseases being as low as 0·03 per 1000.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns, 5622 births and 3149 deaths were registered during the week ending the 25th ult. The annual death-rate in these towns, which had been equal to 18·4 and 20·2 per 1000 in the two preceding weeks, fell again last week to 19·1. During the first eight weeks of the current quarter the death-rate in these towns averaged 20·1 per 1000, against 19·8 and 20·4 in the corre-

sponding periods of 1881 and 1882. The lowest rates in these towns last week were 12·9 in Huddersfield, 13·0 in Bristol, 13·2 in Bradford, and 13·9 in Plymouth. The rates ranged upwards in the other towns to 23·8 in Manchester, 24·2 in Wolverhampton, 27·6 in Newcastle-upon-Tyne, and 30·2 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns declined again last week to 618; they included 273 from diarrhœa, 115 from scarlet fever, 88 from measles, 59 from "fever" (principally enteric), 44 from whooping-cough, 30 from diphtheria, and 9 from small-pox. The lowest death-rates from these zymotic diseases were recorded last week in Bristol and Blackburn, and the highest in Preston and Newcastle-upon-Tyne. The deaths attributed to diarrhœa showed a decline from the number in the previous week; the disease was nearly three times as fatal in the provincial towns as in London, and caused the highest death-rates in Salford, Leicester, Newcastle-upon-Tyne, and Preston. Scarlet fever showed the largest proportional fatality in Birmingham, Leeds, and Sheffield; measles in Brighton and Newcastle-upon-Tyne; and "fever" in Leeds. The 30 deaths from diphtheria in the twenty-eight towns included 19 in London, 2 in Leeds, 2 in Sheffield, and 2 in Cardiff. Small-pox caused 6 deaths in Birmingham, 2 in Liverpool, and 1 in London. The number of small-pox patients in the metropolitan asylum hospitals, which had been 56 and 50 on the two preceding Saturdays, was 52 at the end of last week, 8 new cases having been admitted during the week The Highgate Small-pox Hospital contained 4 patients on Saturday last, 3 new cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 177 and 178 in the two preceding weeks, fell to 160 last week, and were 4 below the corrected average. The causes of 57, or only 1·8 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, and Norwich. The proportions of uncertified deaths were largest in Wolverhampton, Bolton, Halifax, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 19·7 and 20·2 per 1000 in the two preceding weeks, further rose to 21·1 in the week ending the 25th ult.; this rate was 2·0 above the mean rate during the week in the twenty-eight English towns. The rates in the Scotch towns ranged from 11·9 and 15·6 in Perth and Edinburgh, to 26·8 and 30·7 in Greenock and Paisley. The deaths in the eight towns included 81 which were referred to the principal zymotic diseases, showing a further decline from recent weekly numbers; 34 resulted from diarrhœa, 15 from scarlet fever, 11 from whooping-cough, 9 from diphtheria, 7 from measles, 5 from "fever," and not one from small-pox. These 81 deaths were equal to an annual rate of 3·4 per 1000, which was 0·3 below the rate from the same diseases in the large English towns. The highest death-rates from these diseases in the Scotch towns last week occurred in Glasgow and Paisley. The 34 deaths attributed to diarrhœa showed a further decline from the numbers in recent weeks, and were no fewer than 47 below the number in the corresponding week of last year; 19 occurred in Glasgow and 5 in Paisley. The 11 deaths from whooping-cough, of which 8 were returned in Glasgow, corresponded with the number in the previous week. The 15 fatal cases of scarlet fever, however, exceeded the number in any recent week; 12 occurred in Glasgow. The 7 deaths from measles included 4 in Glasgow, and the 5 from "fever" 2 in Edinburgh. The deaths referred to acute diseases of the respiratory organs in the eight towns showed a decline of 5 from the number in the previous week, but exceeded the number in the corresponding week of last year by 7. The causes of 58, or nearly 12 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 17·2, 20·9, and 24·9 in the three previous weeks, fell again to 21·2 in the week ending the 25th ult. The mean death-rate in the city during the first eight weeks of the current quarter was equal to 21·5 per 1000, against 20·2 in London and 17·1 in Edinburgh. The 142 deaths in Dublin last week showed a decline of 25 from the number in the previous week; they included 9 which were referred to diarrhœa, 5 to "fever," 3 to scarlet fever, 2 to whooping-cough, 1 to measles, and not one either to small-pox or diphtheria. Thus 20 deaths resulted from these principal zymotic diseases, against 6, 13, and 17 in the three previous weeks; they were equal to an annual rate of 3·0 per 1000, and corresponded with the rate from the same diseases in London, while in Edinburgh it did not exceed 1·8. The 9 deaths from diarrhœa exceeded the number in any previous week of this year. The deaths referred to "fever" and scarlet fever also showed an increase upon recent weekly numbers. The fatal cases of whooping-cough, however, showed a considerable decline. The deaths of infants showed a decline from those returned in the previous week, while those of elderly persons were fewer than in any previous week of the year. The causes of 22, or more than 15 per cent., of the deaths registered during the week were notcertified.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—Brigade Surgeon Julius Wiles has been granted retired pay, with the honorary rank of Deputy Surgeon-General; Surgeon-Major Alexander Johnston, M.D., has been granted retired pay, with the honorary rank of Brigade Surgeon. The undermentioned Surgeons on probation to be Surgeons:—David Bruce, M.B., Edward Horace Lyden Bell, M.B., John Riordan, M.B., Henry Anthony de Lom, Robert Hammill Firth, George Nelis, Patrick Joseph Gallwey, M.D., Robert Reginald Heber Moore, Patrick James Barry O'Shaughnessy, John Robert Stevenson Robertson, M.B., Alan Edmondson Tate, Charles Edmund Faunce, William Henry Lendrum, M.D., Henry James Wyatt, Henry Charles Gordon, M.B.

ADMIRALTY.—The following appointments have been made:—Staff-Surgeon James Dunlop, to the *Tourmaline*, vice Charles Lyon Ridout, deceased; Fleet Surgeon Richard C. P. Lawrenson, to Malta Dockyard, vice Daniel Finucane, M.D.; Fleet Surgeon John S. Dobbyn, M.D., to the *Hercules*, vice R. Lawrenson; Staff Surgeon Richard A. Mowll, M.D., to the *Inflexible*, vice Henry N. Sedgwick; Surgeon Thomas Nunan, M.D., to the *Inflexible*, vice Matthew Digan; Surgeons F. J. Lea, T. C. Rowland, M.B., E. J. Morley, H. W. Macnamara, J. H. Whelan, M.D., P. W. Bassett-Smith, J. P. J. Coolican, R. W. Doyne, E. R. Disney, J. R. M'Donnell, M.D., D. W. Donovan Hamilton Meikle, and Herbert Canton, to the *Duke of Wellington*, additional for service in Haslar Hospital; Fleet Surgeon A. B. Messer, to the Royal Marine Artillery Division, Eastney, vice Adam; Staff Surgeon T. H. Atkinson, to the *Neptune*, vice Messer; Surgeon R. E. Biddulph, M.B., to the *Vigilant*, vice Clibborn; Fleet Surgeon J. P. Courtenay, to the *Agincourt*, vice Cooper.

Correspondence.

"Audi alteram partem."

SEWER VENTILATION.

To the Editor of THE LANCET.

SIR,—The simplest form of drainage is that of a pipe, of sufficient diameter, outside the houses, leading from the sewer to a few feet distance above the roof of the house, into which the watercloset pipes from the house fall; and sewer-gases are prevented from entering the house by traps. The overflow from water cisterns, sinks, baths, and lavatories, being dissevered, open by free ends outside the house over trapped gratings. By this method every house would become a sewer ventilator, and the openings in the roads comparatively unnecessary; but houses are not usually made their own ventilators; and, though ventilation is sometimes supplemented by means of pipes carried up trees or lamp-posts, the erection of a shaft by the side of the house is generally objected to by the occupier.

In dry weather the roads are apt to become additionally noisome from the water in the traps to the gullies being evaporated, and this is especially the case when storm-water is excluded from the sewers, and flushing by means of water carts, &c. has to be constantly done. I think this

difficulty might be got over effectually if every householder would mix a tablespoonful of disinfectant in a pail or two of water, and flush his drains with it daily. By this means extensive dilution would be effected, decomposition arrested, the noxious smells of sewer gases materially obviated, and the sewer rendered wholesome for the public security and for the sewer men who have to enter it frequently. There are 12,000 houses in the Lewisham district alone, and I think it is evident that the general adoption of the above treatment would be most effectual, both in preventing disease and in destroying noxious odours.

I am, Sir, your obedient servant,

F. EACHUS WILKINSON, M.D.,
Medical Officer of Health for Lewisham District.

Sydenham, August 29th, 1883.

"LENGTH OF INCISIONS IN OVARIOTOMY."

To the Editor of THE LANCET.

SIR,—Two points in Mr. Battle's letter require comment. His insinuation that the cases which make up Mr. Owens' list are probably the result of a picking of cases, for the purpose of getting good results, is based on ignorance of the fact that it is quite as impossible to pick out cases for recovery as it is to predict the rainy days of a coming week.

He formulates a question of a not very intelligible kind in the words, "Does practical experience prove that long, firm cicatrices cause any inconvenience to patients after the operation?" It is not the firm cicatrices which cause the trouble, but the loose ones, and they are numerous. Every inch, every fraction of an inch, which a surgeon can spare from his incision will increase the comfort of his patient in after life.

I am, Sir, yours, &c.,

Birmingham, Aug. 27th, 1883. LAWSON TAIT.

SUDDEN DEATH FROM FRIGHT.

To the Editor of THE LANCET.

SIR,—The following case appears worthy of being placed on record:—

G. E. H——, aged seven years, the son of a sweep, had been witnessing a fight between two gipsy lads, when, as the contest became exciting, he suddenly fell backwards and was dead in a few moments. I was called in by the police immediately after death, and found the body, which was still warm, lying on its dorsal aspect on a soft patch of grass. The features had a placid expression, and his soot-smeared face exhibited the traces of recent tears. It was stated that there was no one nearer to the boy when he fell than the two belligerents, who were about ten yards' distance.

The history which I elicited was as follows:—The father had been a soldier in India and elsewhere for twenty-one years prior to taking up his present occupation, which he had followed for the last three months only. The mother had died suddenly a year ago, and was the subject of a coroner's inquest; but the cause of her death I have, in vain, tried to discover. The deceased was an only son. His sister, aged four years, seems delicate, and I learn that his half-brother and sister are robust and healthy, and have no neurotic tendency. He was of a remarkably affectionate disposition, and was easily excited by the slightest unusual occurrences. The boy had had his dinner a quarter of an hour previous to death, and had kissed his father before leaving home as usual.

Agreeably to the coroner's order, I made an autopsy forty-eight hours after death. The body was plump, and the external aspect on examination showed no marks of injuries or contusions. Head: The dura mater was not adherent to the brain, neither was there any sign of fractures or effusions of fluid. The brain weighed 42 oz., was well formed, firm, and with convolutions and sulci well marked. The puncta vasculosa were a little more than ordinarily prominent. The several ganglia and ventricles of the brain were normal; minute examination betrayed no rupture of bloodvessels or extravasations. The examination of spine showed no dislocation or other injury in the region of the atlas and dentata or elsewhere. The medulla oblongata and cord were apparently healthy. Chest: The right cavity showed a few old pleuritic adhesions; left pleura and cavity healthy. The lungs were normal, though a little gorged with blood; the pulmonary veins contained some fluid blood; the pericardium was healthy, and its secretion was of the normal colour, quality, and quantity; the right auricle was much distended, almost to bursting, with dark grumous fluid blood; the right ventricle was about one-third full of the same; the superior and inferior cava and hepatic veins were also much distended with dark fluid blood; the left auricle was full, but not so distended as the right; the left ventricle also contained a little fluid blood. The pulmonary veins were filled with fluid blood, and the two left veins terminated by a common opening in the left auricle. The heart's septum was normal, and its valves competent, and there was no evidence of rupture or disease. The liver was normal and healthy, the hepatic veins being filled. The kidneys were normal. The urinary bladder was half filled, and was perfectly healthy. There was no sign of injury to the abdominal walls. The diaphragm, peritoneum, spleen, pancreas, and supra-renal bodies were perfectly healthy and in their normal positions.

I gave my opinion at the inquest that death in this instance was due to strong emotion, the emotional impulse being transmitted from the brain to the cardio-inhibitory centre in the medulla, and thence along the inhibitory fibres of the vagus to the intra-cardiac ganglia, thus arresting the heart's action (in diastole). I proceeded to make the post-mortem examination with a prejudiced mind that perhaps the death was due either to external violence on the head or pit of the stomach, or rupture of the heart or some bloodvessel; but after a minute and patient examination I found that I could only arrive at the opinion already given.

I am, Sir, your obedient servant,

London, S.W. J. E. COONEY, L.R.C.P.

"THE VALUE OF ETHER IN COLLAPSE."

To the Editor of THE LANCET.

SIR,—I gather from Mr. Caiger's letter in THE LANCET of August 25th, that the value of ether in collapse is somewhat of a new discovery. I was not aware of the fact when I used it eighteen months ago in a severe case of flooding caused by placenta prævia, the particulars of which I append. I received a message from a fellow practitioner who was ill, asking me to attend a midwifery case for him. On arriving at the house, bag in hand, I found the woman on the bed in such a state that for a moment or two it was doubtful whether she was alive or dead. However, she was alive, and I immediately injected half a drachm of ether. Its effect was magical, so I gave another injection of the same quantity. After this ether and Bonjeau's ergotin were injected together into the buttock; this produced contraction of the uterus, and brought the head down to close the os, where it was maintained in position by abdominal pressure. Shortly afterwards I turned and delivered, and the woman made an excellent and rapid recovery.

I am, Sir, yours faithfully,

HERBERT H. MEYERS, M.R.C.S., L.R.C.P.

Woodstock-road, Finsbury-park, August, 1883.

LIVERPOOL.

(From our own Correspondent.)

THE WEATHER.—AUTUMNAL AILMENTS.—PREPARATIONS AGAINST CHOLERA.

THE heat has been very intense in Liverpool during the past fortnight, causing the usual autumnal complaints, especially diarrhœa. Many persons have suffered from colds, probably from imprudent exposure to open windows. As there is such frequent communication between Liverpool and the Mediterranean, the prevalence of cholera in Egypt has caused some uneasiness here. But even had a case unfortunately been brought to the Mersey, every preparation had been made to prevent its spread.

THE INFIRMARY FOR CHILDREN.

A great deal of interesting medical and surgical practice is to be seen at this infirmary. Dr. Armstrong has had a large number of cases of empyema in children during the

last twelve months. The hypodermic needle is used very freely in the out-patients' room as a means of diagnosing effusion in the chest, and in severe cases where the physical signs did not seem to point to effusion the hypodermic needle has obtained pus. All the cases of empyema have been treated by incision and free drainage, under strict antiseptic precautions, and they have all resulted in recovery, with re-expansion of the lung, and very little, if any, contraction of the chest walls.

A USEFUL BATH-BED.

At this same infirmary there is a very ingenious and useful bath bed, which the medical staff find to be of great use in many different ailments, such as severe scalds or burns with collapse, or in cases of hyperpyrexia. It consists of a large wooden tank, about five feet long, by two and a half feet broad, and a little more than a foot in depth. It is lined inside with zinc, and has a tap fixed to the bottom for draining purposes. It is supported on an iron bed-cot, and is filled with water to within a few inches of the top. A large mackintosh sheet is spread over the surface of the water and allowed to fall over the sides of the tank for a foot or so on each side. This sheet may be fastened, if necessary, to the side of the tank. The patient is laid on the mackintosh sheet, a blanket or a linen sheet intervening, and he practically floats in the water. The water can be kept at any temperature that is thought proper. At present the bath-bed is being used for a case of typhoid fever with hyperpyrexia, and is filled with cold water at a temperature of 60° F., so that the patient has all the benefit of the cold water treatment by plunge bath or douche without the many inconveniences. In many cases of collapse, also where warmth is useful, the temperature of the water can be raised to 80° or 90° F. and kept at that temperature. The bath-bed can be used besides for cases of prolonged illness, with tendency to bedsores, for the prevention of which it is superior to the ordinary water-pillow.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

THE LATE MR. J. I. ATKINSON, OF WYLAM-ON-TYNE.

THE notice in your obituary column of the death of this gentleman, last week, at Wylam-on-Tyne, after a short illness would be received with great regret by many members of the profession in distant parts of the world, for Mr. Atkinson was well known and respected as a leading practitioner on the Tyne, and pursued a most successful career of nearly fifty years as a country surgeon, having a wide range of friends and patients. Only a few short months ago you noticed the well-deserved presentation which he received from his patients of an illuminated address, silver inkstand, and a carriage. Mr. Atkinson was then in good spirits, and apparently in the best of health. Still, in thanking the subscribers, he said, "I look upon the testimonial as one of the 'milestones on the road of time,' which remind me of the length of the way I have travelled, and the shorter portion of the journey to be traversed." His funeral, which took place last Thursday, was attended by a large concourse of friends, professional and others, and by many sorrowing old patients. His remains were laid in the picturesque old churchyard of Ovingham, well known as the family burial place of Bewick, the celebrated engraver. Near here, one of the most beautiful reaches of the Tyne sweeps near to the walls of the old church, supposed to be one of the most ancient in Northumberland.

THE NEW SANITARY HOSPITAL FOR NEWCASTLE.

The designs for our new sanitary hospital, to be erected at Heaton, are now on view at our Guildhall, and exhibit much architectural skill, and even some artistic feeling, considering the hard-and-fast requirements of the Committee of Selection of our Corporation. At all events, we are to be congratulated on the near prospect of obtaining a hospital for infectious diseases commensurate with the growing importance—as regards population—of our borough and suburbs.

LEAD-POISONING.

This subject continually crops up, here and in Gateshead, at the meetings of the guardians and other bodies, and scarcely a day passes without some reference to it being made in our local papers. There can be no doubt that a serious amount of illness is caused by the manufacture of white lead amongst the female hands. It is also certain that the proprietors spare no trouble or expense in reducing the risks, inseparable from the handling of white lead, as much as possible; still, probably to a great extent from the carelessness of the women employed, we shall continue to hear of these cases until some means are devised of employing machinery more generally in some of the stages of white lead manufacture instead of female manual labour.

FOOD ECONOMICS AT DARLINGTON.

At the Darlington Union the other day, the subject of providing the inmates with a weekly fish dinner was discussed, and most of the guardians were favourable to the change. One speaker, in giving point to his arguments in favour of fish, said it was a diet eminently adapted for elderly people; it enabled them to do more work, and at the same time it was calculated to prolong life in the old; but another guardian—let us hope only in a humorous way—objected most strongly to provide any diet which was calculated to prolong pauper life, as it was decidedly against the interests of the ratepayers.

Newcastle-on-Tyne, Aug. 28th, 1883.

SCOTTISH NOTES.

(From our own Correspondent.)

THE CHOLERA SCARE.

THE Egyptian outbreak, about which we have all been concerned, is likely to have an excellent effect in Scotland. By the end of this summer it will be safe to assume that at no former period have we been in such readiness to receive the terrible visitor. With us it is in the smaller towns, villages, and rural districts where the management of health matters is conspicuous by its absence; but within the past few weeks there has been such a clearing away of nuisances and such an inculcation of the A B C of sanitary laws as has astonished the creatures living amongst filth and deficient ventilation, and drinking the most polluted water. These visits have proved to demonstration that, unless under the management of an active medical officer, our sanitary inspectors have not sufficient pressure to even respectably perform their functions. Some of the cases recently exposed could scarcely be believed in this era of sanitary work, but some of the inspections made by country local authorities would be almost ludicrous were the subject not of such vast importance. The Board of Supervision has on two occasions very pointedly informed local authorities of their duties, but the necessity of such an upheaval throughout the country only proves the necessity for a better organised permanent staff. The principal towns are fairly well prepared, and their medical officers have generally been very prompt in exposing faults. As regards the water-supply, these eight are all well served, with the exception of Perth, which continues to indulge in filtered sewage. At Aberdeen, Dr. Simpson has been well supported by the commissioners, and he has, with very little opposition, been supplied with an extra assistant. In the discussion concerning this, Dr. Simpson's services were very highly praised.

THE USE OF DISEASED MEAT AS A FOOD.

At the last meeting of the Scottish Metropolitan Veterinary Medical Association an interesting discussion arose upon this question. Professor Walley remarking upon an action in the Sheriff's Court of Glasgow recently, in which butchers were condemned for the sale of certain parts of animals suffering from foot-and-mouth disease, urged that it was as yet unproven that any harm resulted from the consumption of such food when properly cooked. He agreed that wherever marks of disease were found organs should be condemned, but stated that there was absolutely no alteration to be detected either in the blood or tissues of the animals which had been slaughtered while suffering from disease. Another gentleman animadverted upon medical evidence in such cases, saying that he found them very ignorant of these matters. Professor Williams said that upon these principles the flesh of all diseased animals might be used as food if cooked; but he did not know a veterinary

surgeon who would assert that the lungs of such an animal could be eaten with impunity. He thought that they should condemn all portions of animals suspected of pleuro-pneumonia, and not encourage the sale of diseased meat. Professor Baird appeared to agree with Mr. Walley. It seems strange that this important question has not been settled long ere this. It appears to require a most thorough scientific investigation; and it is surely not impossible that the experience of medical men, veterinary surgeons, and microscopists should be able thus to arrive at a definite issue. At present experience shows opinion to be of the most haphazard kind.

THE MEDICAL BILL.

The comments in THE LANCET of last week should be laid to heart by the corporations in Scotland. It is felt here that the loss of the Bill is entirely due to the prevention of its second reading through the management of the wire-pullers of these bodies. Men who only wish prosperity to the profession may well feel that the representatives of the Universities went further than they ought to secure the co-operation of those who fear legislation as they do the light. It is an open secret that neither Sir Lyon Playfair nor Dr. J. A. Campbell would have objected to the corporations having two additional representatives, and had such an arrangement been come to those who value higher medical education in Scotland would have had much cause for complaint. It is with the extra-mural lecturers that sympathy is felt; but they have so associated themselves that the birds of a feather argument begins to be used concerning them.

Dunblane, Perthshire, which has long been much frequented by summer visitors and invalids, has found the too common bar to its progression in the presence of a wretched water-supply. The police commissioners seem now determined to rectify this long-standing complaint.

Dundee University College will be opened on October 5th, the opening ceremony being performed by the Earl of Dalhousie, assisted by the Earl of Camperdown and other noblemen. Professor Stuart will deliver the inaugural address, and the civic authorities mean to make the most of the auspicious occasion.

PARIS.

(From our Paris Correspondent.)

THE COUNT DE CHAMBORD.

THE death of the Count de Chambord, which was anticipated some time since, took place on Friday, the 24th inst. The necropsy was performed in the presence of Drs. Drasche and Mayer of Vienna, and Professor Vulpian, who was re-summoned from Paris, but who arrived at Frohsdorf just as the much-regretted Prince had breathed his last. The lesions found were ulceration of the stomach and of the lower end of the œsophagus, slight atrophy of the kidneys, fatty degeneration of the heart, and an atheromatous condition of the aorta. The body was embalmed by Professor Conrad of Vienna, and was then placed in a glass coffin, to be better viewed by the numerous mourners of all classes who flocked to Frohsdorf to pay their last tribute of respect to the ill-fated defunct Prince.

CREMATION.

The partisans of cremation, considering the time opportune for substituting this mode of disposing of the dead for the time-honoured practice of inhumation, under the pretence of destroying the germs of disease, and thus preventing the spread of contagion, forwarded a memorial requesting the Prefect of Police, who is empowered to authorise the incineration of the bodies of those dying from infectious or contagious diseases only during severe epidemics, to make use of this prerogative, in anticipation of the threatened invasion of cholera into this country. The Prefect very properly laid the subject before the Council of Hygiene, through Professor Brouardel, the medical jurist, the conclusions of whose report were adopted by the Council on the following grounds:—The interests of justice, as well as of those unjustly accused or implicated in cases of poisoning, would be seriously compromised by the adoption of cremation, particularly during an epidemic of cholera. Moreover, the manipulations of the corpses necessitated by cremation are more numerous, and would expose the persons employed in carrying out the process to as great risks as, if not greater than when the body is simply deposited in a grave. The Council, however, has appointed a commission to report on the expediency of practising cremation, by way of trial, of the bodies, or fragments of the bodies, removed from the various amphitheatres or dissecting-rooms of Paris, in which on an average 4000 subjects are annually made use of for anatomical and other purposes.

In connexion with the subject of the disposal of the dead, I may note another proposition that has been submitted to the Prefect of the Seine, in which the author recommends the substitution of glass coffins for the wooden ones now in general use. The following advantages are claimed for this mode of sepulture. The glass coffin, which should be hermetically closed by proper cement, being unalterable and impermeable to air or water, would completely isolate the body which it contains from the action of damp, whatever be the nature of the soil in which the coffin is placed. By this means the body becomes mummified, and the coffin will be found intact at the end of five, ten, or twenty years. The mummification will take place slowly in the interior of the coffin, on the condition that the gases which escape from the body during decomposition be absorbed as they are produced, which the inventor says is easily effected, but he does not say how. These two conditions being scrupulously fulfilled, the author adds, the advantages he anticipates are, from a sanitary point of view, incalculable, particularly in a large and crowded city like Paris, where the graves are re-opened at certain intervals to make room for the inhumation of other bodies, during which operation the mephitic emanations arising therefrom contaminate the air, and thus give rise to periodical epidemics. Even independent of this operation, the soil is impregnated with putrid miasmata, exhaled from the corpses through the porous material of the coffin, or when the latter is rotted, and thus the surrounding air and the water in the neighbourhood become contaminated, which must render the vicinity of cemeteries anything but healthy. The author hopes that the Municipal Council will be induced to take the matter into serious consideration, and give effect to a measure so urgently called for.

Since the 1st instant a room has been set apart at the Salpétrière for gratuitous advice to persons affected with nervous and mental affections, and who can follow the treatment prescribed at their own homes. Medicines and baths will also be given gratuitously.

The wards set apart for the treatment of the sick children of the Enfants Assistés are to be closed, and the patient transferred to the Children's General Hospital, where the two medical wards are to be amalgamated under one physician. The vacancies caused by the recent deaths of Drs. Archambault and Parrot, and the retirement, owing to limit of age, of Dr. Bouchut, have rendered this arrangement feasible.

Paris, August 28th, 1883.

THE CHOLERA IN EGYPT.

(From our Special Correspondent.)

DURING the past week more than 5000 deaths have occurred from cholera in Egypt, bringing the total officially reported in the country up to 22,586. In Alexandria 175 deaths have occurred during the last eight days, the number of fatal cholera cases during twelve hours of yesterday (Aug. 13th) amounting to thirty-eight. This, though much smaller proportionately than the mortality in Cairo, is nevertheless discouraging after all the efforts and zeal of the Extraordinary Sanitary Commission. This body has spent £5000 in cleaning up obvious filth, and in scattering carbolic acid, chloride of lime, &c., broadcast; but I fear it has chiefly been the outside of the platter that has received their attention and profited by their labours. One very important point they have omitted to attend to is the ventilation of the sewers. The grated openings were some years ago hermetically sealed by a former President of the Board of Health, because they offended the sensitive noses of the passers-by, the consequence being that the untrapped water-closets act as ventilators. This was amusingly illustrated the other day, when sulphur was being burned in the sewers. A well-known medical man went to see a patient, and found all the family congregated with woe-begone faces in the watercloset, crying out that at last the "yellow wind"

(cholera) had come upon them, as the fumes of sulphurous acid were painfully evident to their senses, and filled the whole house with its odour. The doctor remarked that the smell was at least better than sewer-gas which continually inundated their rooms, and assured them that the present smell was for their ultimate good. This, however, they would not believe, and demanded back their old friend the sewer-gas in preference to this new-fangled infernal visitation.

The proper ventilation of the sewers is a subject that has been pressed on the attention of the authorities by one of the few good sanitary men in Egypt. I understand that an official representation is to be made to the President of the Commission regarding this all-important subject, and it is to be hoped that the matter will receive the attention that it ought to have received long ago.

Unfortunately the Extraordinary Sanitary Commission is also coming into serious conflict with native prejudices. In the villages, the method of disinfection of houses was by a black man performing a rapid evolution through a room, having in his hand a plate of burning sulphur. In Alexandria disinfection has taken the highly scientific form of a carbolic hand spray, which is squirted over everything and everyone in an infected house. The natives loudly complain of this extraordinary innovation, and maintain that they are being poisoned, that the carbolic acid makes their ladies miscarry, and produces all manner of untold evils. The truth is that the Sanitary Commission has, unwittingly no doubt, assumed almost a political character; it is riding rough-shod over the native ideas, and, with more zeal than discretion and tact, is coming into collision with Arab notions and habits at every point. The Arab notables maintain that sanitation is not the object of the Commission, but that there is a dark political conspiracy among the Europeans against the Egyptians. The result is that the natives will not go to the ambulances and the hospitals, where they say the doctors poison them, but prefer to die and rot at home.

One interesting fact is that the mortality from ordinary diseases is at present very much greater than usual. The average number of deaths in Alexandria is twenty to twenty-five per diem; on August 12th, excluding cholera cases, they numbered fifty, and on the 13th fifty-two. Connected perhaps with this fact I have seen within the last few days a tendency for any severe illness to go on from bad to worse, and to end in fatal collapse simulating cholera to some extent, or else for the disease to pass into undoubted cholera. In illustration of these remarks let me mention briefly two cases, one of remittent fever, the other of acute dysentery. The former occurred in the master of a merchant steamship who arrived here in a state of great prostration and depression after being ill for fifteen days with remittent fever caught on the Syrian Coast. He had been supported for several days, in accordance with medical advice, chiefly on brandy, but still felt great languor and muscular weakness. He was taken to the hospital for a few days' rest, was put on a nourishing diet with a few ounces of port wine, and seemed to be slowly improving. Suddenly he became much worse one forenoon, passed several whitish stools and vomited once. He had no cramps, but in a few hours became quite cyanotic with cold extremities, weak pulse, almost complete aphonia, and sunken eyes. He complained of pain in the region of the kidneys, and passed no urine during the day. His temperature in the axilla was 95°, and he died eight hours after the appearance of the alarming symptoms. His temperature rose to 101° an hour after death.

The case of dysentery was in a man who was sent from a ship to the hospital, after being treated for some days for dysentery by the ship's doctor, but without improvement. In hospital he did not seem to get much better, but no immediately fatal result was anticipated till yesterday morning, when he was found to be collapsed, with cold extremities, pinched and shrivelled skin, and sunken and wasted features. His temperature at midday was 102°, and he died an hour later. At the post-mortem examination, three hours after death, his temperature in the axilla was 99·5°; the regular cholera hand with contracted fingers was observed, rigor mortis was very well marked, and the flexor muscles of the forearm stood out very prominent, hard, and knotted. The stomach contained fluid of a light-green colour, the small intestine contained fæcal matter, and the whole of the large intestine was covered with a granular diphtheritic exudation which, on being scraped off, left a very dark mucous membrane beneath, the congestion of which was intense. The bile in the gall-bladder was very dark and inspissated. There was thus really no symptom of cholera in the morbid anatomy, and yet the sudden collapse and several other points simulated the final stages of a cholera case.

Another interesting case was a typhoid patient, whose symptoms seemed mixed with those of cholera. For some days he had vomiting and diarrhœa, both being decidedly bilious and not choleraic in character; the stools, in fact, being those characteristic of enteric fever; his temperature in the mouth averaged about 101°, being two degrees less in the axilla. His hands were cold, and he had a purplish look about the face, with eyes sunken and surmounted by a dark rim beneath. He was very restless, and had slight delirium occasionally. On Aug. 12th he seemed better. His urine, which for some days was exceedingly scanty and albuminous, was passed much more copiously; the hands became warm, and the temperature equally distributed over the whole body, being 102° in the mouth and axilla in the morning, and 103° in the evening. He spent an exceedingly restless night, however, tossing about in bed and crying out in a hysterical way, and he died next day at 11.30 A.M. This was no doubt a case of cholera-typhoid.

A case of pure cholera happened on Aug. 11th in a young Englishman aged twenty-six, a clerk belonging to a public company. He had suffered from intermittent attacks of albuminuria for some months at least, and always complained of pains in the head. Though naturally of a cheerful disposition he confessed to having felt ill and depressed for two or three days, and on the day of attack ate almost nothing. He went on duty, however, at 7.30 in the evening, and remained at it for an hour. He then felt so unwell that he went off duty, and soon began to vomit; this he did several times and copiously, besides having a watery stool, before he was seen by a doctor, three hours after the attack. His temperature was normal, and he soon vomited a clear watery fluid; after this the vomiting ceased, but he began to complain of cramps in legs, feet, thighs, hands, &c., with shooting abdominal pains. During the next three hours he passed four copious rice-water stools. By this time his hands and forearms were cold, he was bathed in clammy perspiration, and tossed about, complaining of thirst and occasional cramps. Six hours after the attack the hands and feet were bluish, the features pinched, the eyes sunk, and he began to have some difficulty in swallowing the meat juice and stimulants which he freely partook of for some hours. The temperature in the axilla was still normal, but the pulse was imperceptible. His voice, though altered in tone, remained strong to the last. He had difficulty of breathing, suppression of urine, and involuntary rice-water dejections. Six hours before death his temperature in the axilla was 99°, two hours before death it reached 101°, and an hour after death it was 102·5°. This case lasted fourteen hours, the temperature never being subnormal and the voice always strong. All the other features of cholera were characteristic.

About two-thirds of the deaths in Alexandria are occurring in one quarter of the town, a dirty and densely populated district. Still, many Europeans are dying who resided in healthy and airy localities. Let us hope that the ravages of the disease in our city will still be limited, and that in a few weeks more Egypt will be purged of this terrible disease.

Alexandria, August 14th, 1883.

MEDICAL NOTES IN PARLIAMENT.

ON Saturday, Aug. 25th, in the House of Lords, the Royal assent was given to the Public Health Act (1875) Amendment Bill, the Trial of Lunatics Bill, the Cholera Hospitals (Ireland) Bill, and the Epidemic and other Diseases Prevention Bill.

In the House of Commons on Thursday, Aug. 23rd, a petition was presented from Kenmare, praying for inquiry into the Irish Lunatic Asylums. Petitions for alteration of the Medical Bill were presented from Scarborough, Sunderland, and Stafford. The nineteenth annual report of the Registrar-General of Births and Deaths in Ireland was presented; and also a return of inmates of Irish workhouses, ordered on the motion of Mr. A. Moore. The report for 1881 of the Army Medical Department was also presented; as also were three batches of correspondence relating to the cholera epidemic in Egypt, including reports by Dr. Hunter A copy was presented of the correspondence respecting the

presence of arsenic and other poisonous pigments in wall-papers and textile fabrics.

Netley Hospital.

Dr. Farquharson gave notice to ask the Secretary of State for War whether he will take advantage of the recent promotion of Sir Charles Pearson to abolish the post of commandant of Netley Hospital, thus removing a long-standing grievance of the Army Medical Department, and carrying out the views expressed in paragraphs 169 and 170 of Lord Morley's Committee.

Vaccination at Deptford.

Mr. Hopwood gave notice to ask the President of the Local Government Board whether a further case of injury after vaccination by the public vaccinator at Deptford has come to his notice, as that of a child vaccinated after the children as to whose injuries Mr. Stevens is stated to have made inquiry; and whether a public inquiry will be made into the above case of Louisa Frost Greenaway, of 69, Hughes-fields, Deptford, as well as the other children previously indicated.

On Saturday, Dr. Cameron gave notice that next session he would move for leave to introduce a Bill to legalise the cremation of the dead.

Hornsey Drainage.

Sir C. Dilke stated to Mr. Anderson that the Hornsey Local Board had ordered the owners of about ninety new houses on the Wright's-park estate to construct cesspools for the reception of their sewage. This was because the house drains were at too low a level to be connected with the sewer, and the Board had no power to order that the drains should be relaid. They hoped, however, that the drainage would be so re-arranged as to discharge into the Tottenham sewers, and the Hornsey Board would endeavour to secure the assent of the Tottenham Board to that solution of the difficulty. The Local Government Board were not aware of any sufficient ground for asking extended powers in these matters.

Parliament was prorogued by Royal Commission to the 12th of November next.

Obituary.

H. LOFTIE STONEY, M.D.

DR. HENRY LOFTIE STONEY, of Dublin, died on Sunday last after a short illness. Deceased was a graduate in medicine of the Queen's University in Ireland, and a Fellow of the Royal College of Surgeons in Ireland. He was attached to the City of Dublin Hospital as ophthalmic and aural surgeon, and held the lectureship on anatomy in the Carmichael Medical College. Dr. Stoney had a very high reputation as a private teacher, and his premature decease is regretted by a very large circle of friends.

Medical News.

NAVAL MEDICAL SERVICE. — At the competition for commissions in this Service, held at Burlington House on Aug. 13th and following days, the undermentioned gentlemen were the successful candidates:—

	Marks.		Marks.
Lea, F. J.	2150	Doyne, R. W.	1885
Rowland, T. C. ..	2125	Dimsey, E. R.	1815
Morley, E. J.	2035	M'Donnell, J. R. ..	1795
Macnamara, H. W...	2025	Donovan, D. W. ..	1780
Whelan, J. H.	2010	Meikle, H.	1725
Bassett-Smith, P. W.	2000	Canton, H.	1690
Coolican, J. R. J. ..	1945		

INDIAN MEDICAL SERVICE. — The following is a list of the candidates for appointments in this Service who were successful at the competitive examination held at Burlington House on Aug. 13th and following days. Twenty-one candidates competed for the five appointments, all of whom were reported qualified:—

	Marks.		Marks.
Pratt, J. J.	2475	Bannerman, W. B...	2230
Shore, R.	2410	Thomson, H.	2015
Barkies, C. I.	2341		

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Aug. 23rd:—

Abbott, Frederick Ernest, The Manse, Penrith.
Alsop, Clement, Teignmouth.
Rev. Shapurji Dadabhai Rhabha, Queen's-road, Norland-square.
Cheves, James Trelawny, Millbrook, Devonport.
Gibbon, Frederick William, Seaham, Co. Durham.
Larking, Arthur Ernest, St. Thomas's-terrace, Southwark.
Robinson, Louis, Saddlescombe, Sussex.
Smithwick, Thomas, Middleton, Cork.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Geo. Augustus Edward Roberts, Middlesex Hospital; Geo. Augustus Garry Simpson, London Hospital.

At the recent examination for the Prizes in Materia Medica and Pharmaceutical Chemistry, the successful candidates were as follows:—

1st.—Arthur Pearson Luff, of St. Mary's Hospital. A Gold Medal.
2nd.—Augustus Fredk. Dimmock, of King's College. A Silver Medal and a Book.

The examination in Arts, for the registration of medical students, takes place on Sept. 13th, 14th, and 15th.

THE Metropolitan Asylums Board have decided to erect a large hospital for infectious diseases at Upton-cross, near West Ham.

THE Hospital Sunday collection at Eastbourne on the 26th ult., the proceeds of which are to go towards the fund of the Princess Alice Hospital, realised, we understand, a full average amount.

ANOTHER FATALITY FROM FOOTBALL PLAYING.—At Arbroath this week a football player received in the course of a game a blow which caused rupture of the liver and death two days subsequently.

UNIVERSITY OF EDINBURGH.—Mr. Andrew Carnegie, of New York, who is well known for his munificent gifts to Dunfermline, his native city, has intimated his intention to subscribe £1000 to the fund for completing the new buildings in connexion with the University of Edinburgh.

BELFAST WATER-SUPPLY.—At a meeting of the Belfast Guardians last week, a committee was appointed, at the suggestion of Dr. Corry, to examine and report upon the condition of the several water cisterns connected with the workhouse, in order to ascertain if they are in an efficient state.

NORTH STAFFORDSHIRE INFIRMARY. — The new Victoria wards in connexion with this infirmary are now occupied and giving good proof of their utility. By the exertions of Mr. Dunnett Spanton, one of the surgeons of the infirmary, the sum of nearly £900 has been raised towards the cost of the wards, £50 only remaining to be collected to cover the whole estimated expense.

THE ROYAL RED CROSS.—The distinction of the Royal Red Cross, conferred by Her Majesty, has been received at Chatham Garrison, for presentation to Miss J. King, nursing sister at Fort Pitt Hospital, in recognition of the special devotion and competency displayed by that lady and her unwearied attentions in nursing the sick and wounded during the Egyptian campaign.

THE local papers announce the death, by accident, of Mr. Edmund Knowles, until lately medical officer of the first district of the Cambridge Union. It appears that whilst Mr. Knowles was walking upstairs on Tuesday night he stumbled, and falling backwards, fractured one or more of the cervical vertebræ.

ON Saturday last Mr. Taylor, chairman of the Sanitary Committee of the Bolton Corporation, formally opened a hospital which has been specially constructed for the treatment of cases of infectious or contagious disease occurring in that borough. Each patient has 2300 cubic feet of space, and every window is made to open. The buildings have cost nearly £5000, and the furnishing £600 in addition.

APOTHECARIES' HALL OF IRELAND.—The following office-bearers have been appointed for the ensuing year:—Governor: T. Collins. Deputy-Governor: R. Montgomery. Court of Directors and Examiners: Edward Bolland, John Evans, Arthur Harvey, Charles Holmes, Charles H. Leet, Charles F. Moore, Henry P. Nolan, Richard G. O'Flaherty, Edward J. O'Neill, Sir George B. Owens, John Ryan, James Shaw, and George Wyse. Representative on the General Medical Council: T. Collins.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BRUNTON, CHAS. EDW., M.B.Cantab., M.R.C.S., has been appointed Assistant Medical Officer to the County Lunatic Asylum, Colney Hatch, vice Brown, resigned.

FOX, T. COLCOTT, M.B.Lond., M.R.C.P.L., has been appointed Physician to the Skin Department at the Westminster Hospital.

HART, H. WHEATLEY, M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to the Hartlepools' Hospital, vice Dr. Darkin, resigned.

KENYON, GEO. ARTHUR, M.B., M.R.C.P.L., M.R.C.S., has been re-appointed Medical Officer of Health for the Birkenhead, Chester, Tarvin, and Wirral Rural, and the Chester, Neston, and Parkgate, and Tarporley Urban, Sanitary Districts combined.

LOVERIDGE, ARTHUR WILLIAMS, M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to the Clayton Hospital and Wakefield General Dispensary, vice Carter, resigned.

LYTTLETON, WM. MARGRAVE, M.D., L.R.C.P.Ed., M.R.C.S., has been appointed Government Medical Officer and Vaccinator for the District of Adelong, New South Wales.

O'NEILL, LAURENCE JOSEPH, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer to the Emerald-street Dispensary, North Dublin Union.

RICHMOND, JAMES, M.B.Oxon., M.R.C.S., has been appointed Assistant Medical Officer to the Crumpsall Workhouse, Manchester Township.

ROBINSON, JOHN WADHAM, M.D. St. And., M.R.C.S., L.S.A.Lond., has been appointed Honorary District Surgeon to the Royal South London Dispensary.

SHAW, JAMES, M.R.C.S., has been appointed Government Medical Officer and Vaccinator for the District of Manning River, New South Wales.

TRIMBLE, JOHN MAXWELL, M.D., M.S. Q.U.I., has been appointed Medical Officer for the Strabane Dispensary District, vice Boyd, resigned.

WILSON, GERALD BARRY, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Second Assistant to the Resident Medical Superintendent of the District Lunatic Asylum, Cork.

WINDER, WILLIAM HENRY, L.R.C.P.L., M.R.C.S., has been appointed Resident Assistant Medical Officer to the Crumpsall Workhouse, Manchester Township.

Births, Marriages, and Deaths.

BIRTHS.

COCKELL.—On the 26th ult., at Richmond-road, Dalston, the wife of Frederick Edgar Cockell, jun., M.R.C.S., of a son.

MARTIN.—On the 21st ult., at Arnheim, Blackburn, the wife of John M. H. Martin, M.D., of a son.

WEBB.—On the 26th ult., at 4, Wymering-terrace, Lavender-hill, S.W., the wife of Hy. Pelham Webb, M.B., of a son.

WYNN-WILLIAMS.—On the 19th ult., at Penywern, Brixton-hill, the wife of T. Wynn-Williams, M.R.C.S., of a daughter.

MARRIAGES.

CHEESEWRIGHT—SNELLING.—On the 15th ult., at St. John's, Lewisham High-road, John Francis Cheesewright, M.R.C.S., of Rawmarsh, Rotherham, to Louisa G., second daughter of the late Joseph Snelling, of St. Mary Cray.

MACGREGOR—SCHOLES.—On the 23rd ult., at St. John's Church, Huddersfield, by the Rev. D. J. MacKimm, M.A., Vicar of Rashcliffe, assisted by the Rev. G. E. Wilson, M.A., Vicar of St. John's, Peter Macgregor, Surgeon, to Sarah Florence, third daughter of John Scholes, Esq., of Clough House, Huddersfield.

O'FARRELL—ROCHE.—On the 22nd ult., at the Church of St. Columbkill, Bray, by the Very Rev. Dean Lee, P.P., assisted by the Rev. T. Bourke, D.D., Thomas O'Farrell, Esq., M.A., M.D., Surgeon-Major Army Medical Department, son of Thomas D. O'Farrell, Esq., of Loughrea, Crown Solicitor for Galway, to Maria Josephine, daughter of William Roche, Esq., of 72, Harcourt-street, Crown Solicitor for Limerick.

RICE-OXLEY—AMOS.—On the 23rd ult., at Holy Trinity Church, Clapham-common, by the Rev. Edward Collinson, Rector of Woodsford, near Dorchester, Alfred James Rice-Oxley, B.A.Oxon., M.B., M.R.C.P.Lond., of "Conisbro'," Leigham-court-road, Streatham-common, to Eva Augusta, fourth daughter of the late Charles Edwards Amos, C.E., of 5, Cedars-road, Clapham-common. No cards.

ROSE—ROBERTS.—On the 21st ult., at St. Mary's, Paddington, Henry Cooper Rose, M.D., of Hampstead, to Emily Jessica (Minnie), daughter of the late Edward Roberts, F.S.A. &c., of Bloomfield-road, W.

WEBB—DOCKSEY.—On the 23rd ult., at St. James's Church, Birkdale, Henry Langley Webb, M.R.C.S., of Cheadle, Staffordshire, to Jeanette, only daughter of John Docksey, of Birkdale, Southport.

DEATHS.

BARTLETT.—On the 25th ult., at Ladbroke-gardens, Notting-hill, Joseph James Henry Bartlett, L.R.C.P. &c., second son of the late William Bartlett, F.R.C.S., of Ladbroke Lodge, Ladbroke-square, in his 44th year.

SMITH.—On the 24th ult., at Morningside, John Alex. Smith, M.D.Ed.

STONEY.—On the 26th ult., at Lower Baggot-street, Dublin, J. H. L. Stoney, M.D. Q.U.I.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, August 30th, 1883.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. in Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Aug. 24	30·31	E.	62	57	113	77	55	..	Bright
,, 25	30·23	E.	62	59	108	78	54	..	Hazy
,, 26	30·11	E.	73	64	111	80	55	..	Hazy
,, 27	30·07	W.	65	57	106	78	57	..	Overcast
,, 28	30·04	W.	65	61	115	78	60	..	Cloudy
,, 29	29·83	W.	66	61	105	74	60	..	Cloudy
,, 30	29·94	S.W.	62	58	..	..	58	..	Cloudy

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

THE STUDENTS' NUMBER OF THE LANCET will be published on Saturday next, Sept. 8th. Those gentlemen holding official situations connected with Medical Institutions in the United Kingdom, who have not yet forwarded the necessary information to our Office for publication in that number, are earnestly requested to send it *without the delay of a single post.*

"OUT-PATIENT DEPARTMENTS."

To the Editor of THE LANCET.

SIR,—I should not have trespassed upon your valuable space further but that the letter of "D. A. K.," in your impression of August 18th, calls for a few brief additional remarks on my part. "D. A. K." will excuse me if I point out to him that because a certain system obtains at his institution and one or two that he knows, it does not follow that it should do so in all; and unless he is sure that it does, he has no right to contradict my statement. The hours of attendance mentioned in my letter must be well known as correct to many of your readers, and even if they were not, the fact of patients coming, as "D. A. K." himself says, at 11 or 12 (that is earlier than I stated), certainly lends support to my observations. As regards the plan of two assistant physicians and two surgeons, of course that is admirable, and well meets the difficulty; but at how many hospitals is this arrangement adopted? I think very few. The method of two sexes being seen alternately by the same physician must, I should think, have its inconveniences. To conclude, if the hospitals are not able to increase the staff sufficiently, then the best and truly most simple plan is, as I said in my first letter, to put up a board to the effect that men are admitted at one hour—say 12.30, and women at 2.30. The difficulty of the staff having to wait the convenience of patients would easily be surmounted by the latter not receiving letters if they did not come at the right time.—I am, Sir, yours sincerely,

August 24th, 1883. A. D.

"ADMINISTRATION OF ANÆSTHETICS."

To the Editor of THE LANCET.

SIR,—In reply to Mr. Richmond Leigh's questions, I inform him that the anæsthetic is as near as possible exactly measured by a minim measure, and that an administrator is required in this as in all modes of using anæsthetics, but a nurse or relative of the commonest intelligence can measure the quantities if shown what to do. The anæsthetic can be, and always is, added without removing the inhaler.

I am, Sir, yours faithfully,

Salisbury, August 27th, 1883. WM. MARTIN COATES.

THE GROWTH OF THE HEART.

THE *Hamburger Nachrichten* has recorded the observations made on the above subject by the late Dr. Benecke of Marburg. According to these investigations the greatest and most rapid growth of the heart takes place during the first and second years of human life. By the end of the second year its bulk is said to be exactly double what it originally was. Between the second and seventh years it is again almost doubled. A slower rate of growth now sets in until about the fifteenth year, the augmentation of volume during the intervening seven or eight years being only about two-thirds. In the period of maturity which now approaches the growth of the heart again makes progress, the increase keeping pace with the advance towards maturity of the other portions of the system. Thus, as compared with its size at the age of fifteen, two-thirds have been added by the age of twenty. After the twentieth year the rate of development again becomes slower, but an increase in volume is perceptible up to the fiftieth year. The annual gain in bulk during that period is supposed to be about ·061 of a cubic inch, and the maximum volume thus attained is estimated at from 16 to 17 cubic inches. Growth ceases after the fiftieth year is passed, and a slight diminution in the size of the heart ensues. This is regarded as a part of the general effects of approaching old age. As to the comparative size of the heart in males and females, it is stated that in childhood there is no difference of any note. When maturity sets in the male heart develops more than that of the female, and the difference of 1½ to 2 cubic inches thus established is said to be maintained throughout the remainder of life.

HEREDITARY PREDISPOSITION TO FRACTURES.

To the Editor of THE LANCET.

SIR,—The following case of a peculiar hereditary predisposition to fractures occurred in the midwifery practice of Dr. Hurford, during whose absence from town I attended a Mrs. M—— in her second confinement, and delivered her of a well-developed male child on July 14th. Calling on the 16th, I found the left humerus and femur of the infant both fractured about the middle of the shafts, without any history of accident or violence of any kind; and again, on the following day, the right humerus was found fractured in a similar situation, but this time the mother explained it by saying that she was moving her child in bed when the arm caught in the bedclothes, and she felt the bone snap.

A soft bandage was applied round the limbs over the fractured ends, and the nurse was ordered to handle the infant as gently as possible. Both humeri did well, and there is now a thick ring of provisional callus round the united ends; the thigh has also united, but with considerably more tenderness and swelling, and, as might be anticipated, not in quite such good position. Calling to see the infant on August 4th, I was surprised to find the other thigh fractured in a similar way, thus completing the round of the four limbs; this also is now undergoing the process of union.

The child presents no symptoms of rickets, such as enlargements of the ends of the bones, beaded ribs, &c., and the first child, now aged two years, is in good health and strong. The family history of the mother is good. The father, however, was one of eight children, two of whom suffered from fractures in infancy, and the only brother, who is married, is the father of four children, the first of whom had fracture of the arm, the third a fracture of the thigh, and the fourth fractures of all four limbs, which occurred spontaneously at, or soon after, birth. They have all done well, being treated at University College, where one of them only was said to be rickety.

On his return to town, Dr. Hurford saw my little patient, and the mother was asked to take it down to St. Bartholomew's Hospital on Friday, where, in the absence of Mr. Howard Marsh, the child was seen by Mr. Edwards, but up to the present no explanation has been given of such a peculiar family history and such a surgical curiosity.

I am, Sir, yours faithfully,

August 20th, 1883. OWEN PRITCHARD, M.D. Brussels, &c.

"LAWN TENNIS LEG."

To the Editor of THE LANCET.

SIR,—I was struck by the description of a "lawn tennis leg," by a correspondent, Dr. R. W. Powell, in your journal of July 7th, as being identical with a case I had just been treating. I was summoned to see Major M——, aged forty-five, a short, stout-set man, on May 24th, who stated to me that while playing tennis he suddenly felt as if some one had hit him with a cricket-ball in the calf of the leg, and he turned round to see who did it. On examination I found the calf tense and swollen, especially the lower half, and painful to the touch, with inability to rest the foot on the ground without causing pain. After two days had elapsed the surface became ecchymosed and boggy on pressure. I came to the conclusion that he had probably ruptured the plantaris muscle. As he lived close to the sea, I recommended soaking the leg in sea water, rest, and bandaging. Finally he used stimulating embrocations, and wore an elastic stocking, which, from its uniform pressure and great support, reduced the inflammation rapidly, and added very much to his comfort. He returned to duty on June 12th, twenty days after the accident.

I am, Sir, yours, &c.,

H. H. STOKES, M.B., Surgeon, A.M.D.

Barbadoes, W. Indies, August 7th, 1883.

EPILEPTICS IN WORKHOUSE WARDS.

COL. WEBB writes to correct a misapprehension which might arise from the report of the meeting of the Kensington Board of Guardians of August 9th, which appeared in a contemporary, and upon a part of the proceedings at which meeting we commented in our issue of August 18th. Col. Webb states that in his remarks "it was not suggested that the use of the ward is required for persons sent there under a magistrate's order, for no person can be so sent; but for those who are in the insane ward of the workhouse under examination, and remaining there for the short period of remand allowed to the magistrate; for these cases assuredly the insane wards of a workhouse are legally and advisedly places of remand for persons charged with being insane. It is even a question whether, in spite of the fact that there is not the possibility of obtaining in a workhouse ward the same amount of curative treatment as in an asylum, it would not be advantageous in many doubtful cases for the magistrate's power of remand to be extended beyond the present period of a fortnight, especially in the absence of the special institution advocated." There is no right or power to use the wards of a workhouse as a place of remand by order of a magistrate. This is a matter of great moment, and we advise Col. Webb to look into it. The result of the practice in vogue is mischievous.

Amicus is referred to our advertising columns. We know of no public institution of the kind named.

"AMERICAN DEGREES."

To the Editor of THE LANCET.

SIR,—Will you permit me to mention a few facts in reference to "An American Graduate's" letter in THE LANCET of this week. In a leading article in your issue on Jan. 27th, 1883, you point out that the "number 'of institutions where students can be taught and graduated in medicine" in the United States is at the present time 110; that, in addition to these, "no fewer than fifty-six others were set going and .... have now become extinct." To quote from your leader *in extenso*—"In America the period of study is three years, and when we add that one year of these three years devoted to medical study may be spent with a 'preceptor,' no further proof is needed to show that the training at the colleges must be so hurried as to lack thoroughness and a truly practical nature. In accordance with this we find to a large extent attendance upon 'clinics'—clinical lectures—stands in place of daily attendance upon hospital wards, while in the regulations for graduation there is a conspicuous absence of any law requiring the holding of such posts as those of dresser and clerk."

Surely the word of warning which a "British Practitioner resident in the States" gives us as to the registration of these degrees is not uncalled for. We see what regrettable results have arisen from the multiplicity of examining boards in this country (nineteen in Great Britain and Ireland), so that it takes no great effort to imagine what the condition of things must be where 166 universities have struggled for existence.

I am, Sir, your obedient servant,

August 27th, 1883. A. S. N.

P. S.—Your correspondent, I think, somewhat hastily throws down the gauntlet and asks, "Is it a fact that the average British practitioner either of medicine or surgery is in advance of his American *confrère*? We all know that comparisons are to be avoided, but as he asks the question, I venture to point to the above in reply.

REMARKABLE CURE OF CATARACT IN A DOG.

To the Editor of THE LANCET.

SIR,—I have received the enclosed communication from a gentleman in Clifton. It seems to me so interesting that I think perhaps you may be able to find room in your journal for it. I am sure many professional and non-professional people will feel interested in reading it.

I am, Sir, yours truly,

Caledonian-place, Clifton, Aug. 21st, 1883. EDWARD C. BOARD.

"For the last nineteen months my little dog (now seventeen years old) has been getting very blind, and a cataract had formed in the right eye, so that she could not see in the least out of it. A few days ago she was playing with or teazing the kittens in the kitchen, when the mother flew at her and scratched her face. The dog gave a scream of pain and ran away, and upon the footman examining her a few minutes after, he found the cataract entirely gone. The eye discharged a good deal for a day or two, but it has quite healed, and the little dog evidently sees as well as ever."

"GAS AND ETHER APPARATUS."

To the Editor of THE LANCET.

SIR,—The description of the gas and ether apparatus made by Messrs. Mayer and Meltzer, published in THE LANCET of July 7th, and just to hand, resembles so closely that of the apparatus invented by me and described in the *British Journal of Dental Science*, 1878, that I hope you will pardon me for drawing attention to it. I believe it is used by many dental surgeons. Though compelled by poor health to seek a warmer climate and a different sphere of action, I cannot forget the trouble I took over the instrument, and the satisfaction with which I used it in hundreds of cases.—I am, Sir, your obedient servant,

T. J. PEDLEY, Health Officer, &c

Rangoon, British Burmah, July 30th, 1883.

DEATH-RATES IN PENITENTIARIES.

THE death-rate in the principal penitentiaries of the United States forms a notable feature in the report of Dr. Gill, of the Illinois Prison, the variations in the different institutions being very striking. Thus among New York prisons, while at Sing Sing the yearly deaths from one thousand inmates number, as stated in the report, a fraction less than 7, at Auburn the death-rate is given at 12, and at Clinton over 20. The lowest rate named is 3, in Wisconsin, and the highest 77, in Mississippi. The practice of "letting" convicts for work on mines and railroads is declared to cause fearful death-rates in several Southern States.

Alex. Stewart, M.B., &c.—Our correspondent will have seen that the discussion of the subject of his letter was closed some time since, but not before such views as his had ample room for expression.

"ETHER AS A RESTORATIVE."

To the Editor of THE LANCET.

SIR,—With reference to the correspondence in your paper respecting the hypodermic injection of ether in cases of cholera, I beg to suggest that such treatment has also a most marvellous and speedy effect in stimulating or reviving patients who are suffering from syncope or are in a state of collapse, whether it be due to shock from accident or otherwise; and I suggest that house surgeons and dentists, and, indeed, all who meet with similar cases, should always have at hand a suitable syringe and the ordinary anæsthetic ether.

I pointed out in your columns, some time since, the almost instantaneous effect of this treatment in reviving patients who suddenly become prostrated, either from a protracted operation or from shock during its performance, notwithstanding the patient may be already saturated, so to speak, with ether, and when other measures have effected no good result.

A drachm may be safely regarded as a medium quantity, which may be repeated again and again at very short intervals if necessary, but only, of course, in the case of an adult. It is as well to use a glass syringe capable of holding more than a drachm, say two, and one which has a piston with a sliding action and not a screw, otherwise some difficulty will be experienced in charging the syringe on account of the volatility of the fluid. I may add that Messrs. Wright and Co., of 108, New Bond-street, are makers of such syringes.

I am, Sir, yours truly,

August 17th, 1883. R. FITZROY BENHAM.

L. M.—We are afraid there is nothing in the present state of the law to prevent the use of the title by an unqualified person. When the Medical Bill becomes an Act of Parliament it will be different.

Lord E. Fitzmaurice is thanked.

"A CASE FOR GENERAL SYMPATHY."

To the Editor of THE LANCET.

SIR,—On the 14th April last you were good enough to publish a letter from myself containing a statement of the sad case of Dr. Cedric H. Hurford, who is suffering from general paralysis of the insane, and from time to time you have acknowledged the contributions received. Up to the present date we have collected altogether £617 10s. towards the sum of £1000, which it is absolutely necessary to obtain to provide for Mrs. Hurford. I hope, therefore, that further contributions may be entrusted to me, especially as, since the date of my last letter, the Earl of Derby, as Colonial Secretary, has recognised the special urgency of this case by sanctioning a special and further grant of £50 towards the Hurford Fund.

I annex a list of recent contributions which I have received, and I beg you will accept my cordial acknowledgments for the valuable assistance you have rendered those who are interesting themselves in the Hurford Fund.

I am, Sir, your obedient servant,

Gloucester-road, Regent's-park, N.W., HENRY C. BURDETT.
August 29th, 1883.

Dr. Jervis	£3	0	0
Dr. Sutton	2	2	0
Dr. Everett	1	1	0
W. Thorn, Esq.	1	1	0
J. Benson Cooke, Esq. ..	1	1	0
Dr. J. Tasker Evans ..	1	0	0
Surgeon R. J. Taafe ..	1	0	0
P.O.O.	1	0	0

And the following per Dr. Savage:—

John A. Wallis, Esq. ..	£5	0	0
Henry Stear, Esq	2	2	0
Dr. W. G. Bacot	1	1	0
Alfred Hall	1	1	0
Geo. H. Savage	1	1	0

DELTOID RHEUMATISM.

To the Editor of THE LANCET.

SIR,—Dr. Bristowe, in speaking of deltoid rheumatism, says "in many cases convalescence takes place without the occurrence of complications, but in some cases atrophy of the deltoid, or of a part of it, supervenes after the pains have continued for some time; and when at length, under these circumstances, the pains have subsided, the muscle continues atrophic, although retaining its voluntary and electric contractility. In other cases paralysis, attended with more or less complete abolition of faradaic contractility, supervenes." I have a case which has reached the last stage, after only a few weeks. The muscle utterly refuses to respond to faradisation. Can you or any of your readers say what the prognosis is, and also the appropriate treatment? He is commencing citrate of quinine and strychnia.—I am, Sir, yours, &c.,

August 27th, 1883. M.D.

STATISTICS OF CONSUMPTION.

DR. PLAYTER of Toronto has, says the New York *Medical Record*, gathered facts in regard to consumptives from 250 doctors. Their replies showed that the average age of patients was twenty-seven; 46 per cent. were males, 54 per cent. females, and 23 per cent. were married. The average size of the chest was 31½ inches; the chests of persons of the same average height, 5 feet 5½ inches, would usually average 37 inches. About 55 per cent. had light hair and eyes, two-thirds did in-door work, had slept in small rooms, and were no flannels. Only 46 per cent. had consumptive ancestors, and the majority were of a nervous temperament.

Licentiate in Medicine.—The Society is not authorised to examine in surgery. The legal question raised by our correspondent will be duly considered.

HOSPITAL NURSES.

To the Editor of THE LANCET.

SIR,—Reading in your issue of the 11th inst. a few remarks on a subject which has been much talked of—viz., the want of seats for shop assistants,—it has led me to address a few words to you on a kindred subject, which I have long wished to bring before hospital authorities—that is, the long hours nurses are kept on their feet, sometimes never sitting down for thirteen or fourteen hours, except during the hurried time for meals, half an hour being allowed from leaving the ward to entering it again, and often many stairs and long passages to traverse going and returning. Well do I remember, when I had been about three weeks in hospital, just the time one feels it most, not having got acclimatised, I sat down one Sunday morning beside a patient to count her pulse and respiration, and was loudly reprimanded before the patients by the ward sister. Oh, the wearied aching limbs and backs! Well is it for those who break down under it at once, as they must leave and no doubt recruit and try some other occupation; but many go on and on, wasting strength and energy, till hopelessly invalided, sometimes from love of the work, sometimes from dire necessity. Can it be wondered that a nurse occasionally makes a mistake? No, the wonder is that it does not occur daily and hourly. Then as to the night nurses; they are certainly not always on their feet as the day nurses are, but they are twelve hours without intermission in the pernicious atmosphere; they have not even the chance of rushing to another part of the hospital for a meal, which would be some slight change; all the nourishment they have during the twelve hours being a cup of tea, with probably an egg, if they care to make it ready. I enclose my card. You will see that I do not speak without experience.

I am, Sir, yours truly,

August 27th, 1883. A SUFFERER.

Mr. A. Hall.—We agree with our correspondent, but think the subject rather political than medical.

Vigilans.—The charges are most reasonable.

THE BIRMINGHAM EYE HOSPITAL.

To the Editor of THE LANCET.

SIR,—Our attention has been drawn to a paragraph in your issue of August 11th, in which your correspondent states "it is doubtful if the best advantage has been made of the space at the disposal of the architects."

Will you permit us to state in reply that we were instructed to erect upon a given site buildings in accordance with a somewhat exacting schedule of requirements prepared by the committee and their medical staff, all of whom have had many years' experience of the wants and working of such institutions, and are also acquainted with the internal arrangements and appliances of the most modern hospitals.

We have carried out our instructions, supplementing them by such additions as appeared to us advisable; the several departments of the building are each arranged in the positions most advantageous in relation to the others and in the most suitable aspect, and all whose views we are chiefly concerned to study are satisfied.

We are, Sir, yours obediently,

August 27th, 1883. THE ARCHITECTS.

D. G. D.—*Deutsche Medizinische Wochenschrift* and *Berliner klinische Wochenschrift.*

Radiuseb.—The word is new to us.

FOREIGN MEDICAL DISTINCTIONS.

To the Editor of THE LANCET.

SIR,—In THE LANCET of August 25th there appears an announcement that the Pope has conferred a knighthood on a vice-chancellor of the Melbourne University and founder of its medical school. It is difficult for an Englishman to realise that such a title can be accepted from a dignitary who, whatever his personal qualities may be, is not a temporal sovereign. At a time when so much is being said with reference to the use of medical titles bearing false or misleading meanings, and when a spirit of restless opposition to law and order is so general, it seems ill-advised to admit such higher titles as "Knight Commander" from a foreign source of no legally recognised status, especially as its antecedents point to a continuous upholding of ignorance and interference with constitutional authority.—I am, Sir, your obedient servant,

August 27th, 1883. M.D.

AN OMISSION.

To the Editor of THE LANCET.

SIR,—In my letter, which appeared in THE LANCET of last week, I omitted to state that it was "in the treatment of cholera" that carbolic acid had been recommended by Sansom and Barnes.

I am, Sir, yours obediently,

August 27th, 1883. C. R. ILLINGWORTH.

ERRATA.—In Mr. John Lacey's letter in our issue of August 18th, p. 313, for "setting," read *sitting;* and for "acid," read *aid.*

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Lord E. Fitzmaurice, London; Dr. Grailly Hewitt, London: Mr. Lawson Tait, Birmingham; Mr. C. J. Bond, Leicester; Mr. J. F. Horne, Barnsley; Mr. Walker, Stirling; Dr. Munro, South Shields; Mr. Allam, London; Mr. Martin Coates, Salisbury; Mr. Myers, London; Dr. Naismith, Ayr; Dr. Dalgado; Surgeon-Major Macdonnell; Mr. J. H. Johnson, London; Mr. Pedley, Rangoon; Dr. Carter, Birmingham; Dr. Francis Warner, London; Mr. Batterham, Wolverhampton; Major-General Johnson; Dr. Bakewell, Christchurch, N.Z.; Surgeon H. H. Stokes, Barbadoes; Dr. Grabham, Wellington, N.Z.; Dr. Ashby, Manchester; Mr. Ryan, London; Mon. Dinin, Paris; Dr. Thin, London; Mr. Low; Mr. Elwert, St. Louis; Messrs. Smith and Son, London; Mr. Baker; Messrs. Crossley and Co., London; Messrs. Robertson and Scott, Edinburgh; Dr. Alexander, Glasgow; Dr. Cresswell; Mr. Walker, Glasgow; Mr. Young; Mr. Smith, Kingsland; Miss Smith, Lewes; Dr. O'Keeff; Mr. Travias, Scunthorpe; Messrs. Lee and Martin, Birmingham; Mr. Huggett, Liverpool; Dr. Kaiser, Switzerland; Miss Luttichau, Holloway; Mr. Jennings, Teignmouth; Mr. Wilson, Hastings; Dr. Wood; Mr. Fraser; Mr. Bain; Mr. Arnott, Beverley; Mr. Skinner, Winchelsea; Mr. Adams, Maidstone; Mr. Palmer; Miss Osborn, Fatchan; Dr. Crosswell Hewitt; Messrs. Christy and Co.; Mr. Woodland, London; Dr. Skerritt, Bristol; Mr. Campbell, London; Mr. Clarke, Burton-on-Trent; Messrs. Slinger and Son, York; Mr. Scott, Manchester; Mrs. Rahn, Ipswich; Dr. Buchanan, Glasgow; Mr. Gamgee, Birmingham; Dr. Illingworth; Dr. T. Oliver, Durham; Mr. C. M. Tate, London; Dr. F. E. Wilkinson, Sydenham; Mr. Duncan, Cardiff; Mr. A. Barff; Mr. C. S. Bate; Mr Royes Bell, London; Mr. Chavasse, Birmingham; Mr. H. P. Symonds, Oxford; Dr. Mackie, Alexandria; Mr. Jordison, Malpas; L. M.; No Sator; W.; Medicus, Sussex; Housekeeper; G. M. B.; Medicus, Cranford; A. R. P.; M.D.; An Ex-Lecturer; Director-General of the Naval Medical Department; Vigilans; Radwash; M.D.; A. D; F. S.; W. G.; Licentiate in Medicine; Surgeon, Y.C.; A. S. N.; A Sufferer; M. B.; Dorset; S.; Medicus; &c., &c.

LETTERS, *each with enclosure,* are also acknowledged from—Mr. Bristow, Shaftesbury; Mrs. Childs, Epsom; Mr. Pratt; Mr. Heynsborough, Ceylon; Dr. Murray, Nottingham; Mr. Armstrong, Manchester; Mr. Wheeler, Manchester; Mr. Bashia Brooklyn; Mr. Woodward, Birmingham; Mr. Watson; Mr. Gutmann, Carlsruhe; Mr. Blair; Mr. White, Belfast; Mr. Appleby, Beverley; Mr. Spencer, Sheffield; Mr. Macgregor, Huddersfield; Mr. Hardcastle, Dumfries; Mr. Bond, Brill; Mr. Young, Edinburgh; Dr. Adams, Yeovil; Mr. Bagshaw, Salford; Dr. Water, Geraaftreinst; Mr. Kinder, Leicester; Dr. Webb, Clapham; Mr. Davis, Brighton; Mr. Bedford, Sheffield; Dr. Sibbit, Newcastle-on-Tyne; Miss Beechcroft; Dr. Pritchard; Mr. Wetwan, Bridlington; Dr. Thompson, Banbury; Mr. Sutherland, Glasgow; Mr. Utting, Liverpool; Mr. Watson, Liverpool; Mr. Kerr, Glasgow; Mr. Teome, Colchester; Miss Barker, St. Leonards; Mr. Somerville, Leap; Dr. Hicks, Hendon; Mr. James, Pontypridd; Mrs. Beddingfield, London; Physician, Seacombe; U. S. S.; M. A. F., Belsize-park; L. M.; R. W.; C. G. C. S.; Æsculapius; Surgeon, Finsbury; Galen; Dr. H.; Y., Kensington; X. Y.; J. H., London; Delta, Edinburgh; Jura; Medicus, Brierley-hill; Medicus, Southport; Nemo; Alpha; D. S. J.; Medicus, Sunderland; A. H., Chard; A. B., Watford; Branch; Transfer, Leeds; A., Enderby; Immediate; A. C., London; J. P., Notting-hill; J. M. M. J., London; Medicus, Camberwell; M.D., Basinghall-street; G., Plympton; J. D. R., London; M. M.; Delta; R. A.; S.; Sinecure, Liverpool; Davies; Dr. B., Shelf; Medicus, St. Leonards; Omicron; P. A.; R. W. G.; Honestas; &c., &c.

Staffordshire Sentinel, Sunderland Daily Echo, The Queen, The Telegraph, East London Observer, Tunbridge Wells Advertiser, Glasgow Herald, Rangoon Gazette, Yorkshire Post, &c., have been received.

Medical Diary for the ensuing Week.

Monday, Sept. 3.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

Tuesday, Sept. 4.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Wednesday, Sept. 5.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays, at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.

Thursday, Sept. 6.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

Friday, Sept. 7.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, Sept. 8.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

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Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.